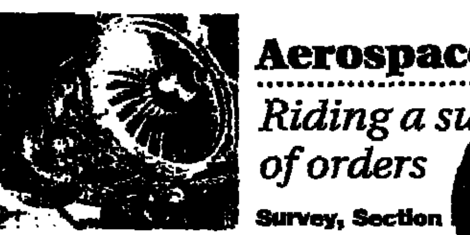
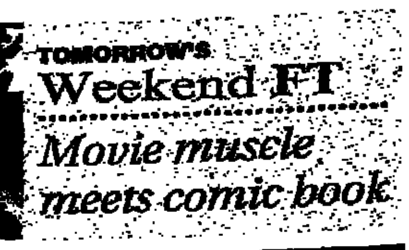
FINANCIAL TIMES

Florence
High density beauty
Page 8

Foreign policy
US pursues a narrow agenda
Europa, Page 8



Aerospace
Riding a surge of orders
Survey, Section II



TOMORROW'S **Weekend FT**
Movie muscle meets comic book

World Business Newspaper http://www.FT.com FRIDAY AUGUST 30 1996

Mexican rebels kill 15 in series of attacks on bases

Suspected left-wing guerrillas killed at least 15 people in attacks on army, navy and police barracks in southern Mexico, in the biggest rebel assault to hit the country since the Zapatista uprising in January 1994. The attacks, which appeared to be closely co-ordinated, took place in six towns in the states of Oaxaca and Guerrero, on Mexico's Pacific coast.

Clinton's adviser quits: President Bill Clinton's influential political adviser, Dick Morris, resigned in response to reports alleging he allowed a prostitute to eavesdrop on a presidential phone call. Page 5; Clinton set to cut tax burden, Page 10; Reborn as a New Democrat, Page 9

Hotel groups in Hilton alliance: Hilton Hotels Corporation of the US and Ladbroke, the UK group that owns the Hilton name outside the US, have agreed an alliance to market and develop Hilton worldwide, covering the 400 Hilton hotels in 49 countries. Page 11; Lex, Page 10

Aircraft crash death toll: All 141 passengers and crew were feared dead after an airliner carrying coal miners from Russia crashed into a mountain on the remote Arctic island of Spitzbergen, Norway. Page 2

Novell chief resigns: In a surprise move Robert Frankenberg resigned as chairman, president and chief executive of leading network software group Novell. Page 11

Japanese Aids expert held: Japanese prosecutors arrested Takeshi Abe, the country's top expert on haemophilia and Aids, on professional negligence charges. They are investigating allegations that he knowingly administered untreated blood products to hundreds of patients. Page 3

Pledge over Middle East peace: Israeli and Palestinian negotiators pledged to continue the peace process after a four-hour general strike called by Palestinian leader Yassir Arafat had been widely observed throughout the West Bank and Gaza. Page 4; Editorial Comment, Page 9

Daimler-Benz chairman Jürgen Schrempp hinted that he was considering an organisational and management reshuffle that would fit the company's leaner corporate image. Europe's largest industrial group reported profits of DM782m ($524.8m), compared with a loss of DM1.57bn a year earlier. Page 11; Lex, Page 10

French stock market slips: The franc and the Paris stock market took a tumble while the government came under attack from both ends of the political spectrum, deepening the despondency that has gripped France recently. Page 10; Farmers' anger flares, Page 2

Disney agrees deal with Kirch: US entertainment company Walt Disney and German media group Kirch announced an exclusive 10-year deal under which Disney/ABC International Television will feed material to Kirch's fledgling DF1 satellite service. Page 13

US hit by wildfires: One of the worst summer wildfire seasons on record in the US has so far blackened almost 5m acres across the west. Page 5

Setback in search for Chechnya peace:

A Chechen woman cries amid the devastated streets of Grozny, the region's capital, as efforts to reach a political settlement to the Chechen conflict met another stumbling block. A meeting of senior Russian officials concluded that "serious adjustments" would have to be made to peace proposals put forward by national security adviser Alexander Lebed. Page 2

Cricket: England beat Pakistan by five wickets in the first Texaco Trophy one-day international at Old Trafford, Manchester.

FT.com: the FT web site provides online news, comment and analysis at http: //www.FT.com

STOCK MARKET INDICES

New York lunchtime		
Dow Jones Ind Av	5,672.48	(-32.92)
NASDAQ Composite	1,160.83	(-3.25)
Europe and Far East		
CAC40	1,977.56	(-25.34)
DAX	2,580.06	(-31.01)
FT-SE 100	3,885.0	(-33.7)
Nikkei	20,553.16	(-156.65)

US LUNCHTIME RATES

Federal Funds	5¼%
3-mth Treas Bills: Yld	5.218%
Long Bond	96½
Yield	7.006%

OTHER RATES

UK: 3-mo Interbank	5¾%	(5¾%)
UK: 10 yr Gilt	97½	(97½)
France: 10 yr OAT	103.71	(103.66)
Germany: 10 yr Bund	98.12	(same)
Japan: 10 yr JGB	100.1424	(99.8624)

NORTH SEA OIL (Argus)

Brent Dated	$20.975	(20.61)

GOLD

New York Comex (Dec)	$392.4	(393.0)
London close	$388.05	(388.5)

DOLLAR

New York lunchtime		
£	1.5575	
DM	1.4795	
FFr	5.0725	
SFr	1.1985	
Y	108.455	
London:		
£	1.5574	(1.5593)
DM	1.4802	(1.478)
FFr	5.0710	(5.057)
SFr	1.1970	(1.1915)
Y	108.40	(108.405)
Tokyo close: Y	108.295	

STERLING

DM	2.3052	(2.3015)

Albania	LEK 220	Gibraltar	£0.75	Lithuania	Lit 15.00	Qatar	QR13.00
Austria	Sch37	Greece	Dr400	Lux	LFr75	S.Arabia	SR12
Bahrain	Din1.250	Hong Kong	HK$20	Malta	Lm0.85	Singapore	S$4.30
Belgium	BFr75	Hungary	Ft230	Morocco	MDh18	Slovak Rp	Sk65
Cyprus	C£1.20	Ireland	IR£1.20	Neth	Fl 4.75	S.Africa	R12.00
Czech Rp	Kc60	India	Rs75	Nigeria	Naira60	Spain	Pta250
Denmark	DKr18	Israel	Shk7.90	Norway	NKr22.00	Sweden	SKr20
Egypt	E£5.00	Italy	L3200	Oman	OR1.50	Switz	SFr3.70
Estonia	EKr27	Japan	Y500	Pakistan	Rs40	Syria	S£65.00
Finland	FMk15.00	Jordan	JD1.50	Poland	Zl 5.50	Tunisia	Din1.750
France	FFr12.00	Kuwait	Fils650	Portugal	Esc (mainland)	Turkey	L90,000
Germany	DM4.00	Lebanon	LL3,000			UAE	Dh12.00

Oil groups to combat corruption

Criminal networks are infiltrating tendering process

By Robert Corzine in Stavanger, Norway

Five of the world's largest integrated oil companies have formed a security team to combat the theft of confidential information on billions of dollars of procurement projects.

Mr Harald Norvik, managing director of Statoil, Norway's state oil company, said yesterday that the companies were being infiltrated by well organised international criminal networks which sought to sell information to potential bidders on their projects.

The security team, hitherto secret, was formed in London by Exxon and Mobil of the US, Shell, British Petroleum and Statoil to "identify and understand the threats" posed by this infiltration, Mr Norvik said

Interpol, the international police organisation, has also been called in to investigate, as have a number of national police forces in Europe, including Scotland Yard in Britain.

Mr Norvik said the the criminals aimed to identify "weak or disloyal" oil company employees who could be persuaded to divulge information on forthcoming contracts. The information was then sold by "middlemen" to contractors.

He could give no precise figure on how much money changed hands in bribes and pay-offs - but across the industry it was in excess of tens of millions of dollars a year. "There is so much black money involved in the oil business when these big contracts are signed," he said.

Oil industry procurement contracts are routinely valued in hundreds of millions or even billions of dollars.

The sheer size and complexity of oil field development contracts made the industry especially vulnerable to an organised criminal onslaught.

Isolated cases of corruption have come to light In 1993, two men were jailed for three years for bribing senior British Petroleum employees to obtain confidential details of North Sea contract bids.

Mr Norvik's disclosures are the first evidence of organised international corruption.

He stressed that most oil industry contractors were not involved, although even some of the more reputable ones appeared at times to be willing "to follow dirty strategies". As a result oil companies were losing control over what should be a fair bidding process.

Mr Norvik said would not speculate about where the criminal networks were based. It was the job of the London security team to find out "where they are, who they are and how they operate" to help police agencies to prosecute the ringleaders.

His disclosures came a week after a Statoil employee and two Britons were arrested on corruption and money laundering charges involving contracts with the Statoil group, which spends about NKr30bn a year in procurement. Mr Norvik said this incident did not appear to be directly related to the wider threat.

Oil industry executives said yesterday that corruption was unlikely to lead to the delivery of defective equipment, as all machinery was tested before use. Nor was it likely to add much greater costs to most individual projects, because of their large size. But corruption had a debilitating effect on staff morale

Stronger US growth fuels rate rise fear

By Nancy Dunne in Washington and Richard Lapper in London

Signs of a strong pick-up in US economic growth yesterday recharged speculation about a future rise in interest rates, sending US and European stock and bond markets lower.

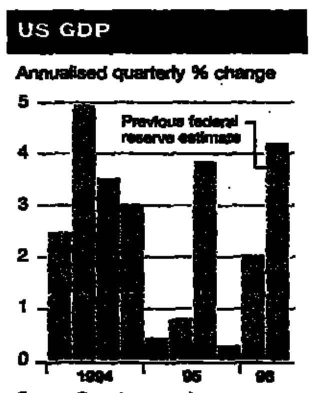
US gross domestic product rose at an annual rate of 4.8 per cent in the second quarter of this year, against the 4.2 per cent estimated a month ago, the Commerce Department said. Markets had expected little change in the figure.

In early New York trading the benchmark Treasury long bond fell almost two-thirds of a point, with the yield rising above 7 per cent for the first time since the end of July. Shares drifted back, with the Dow Jones Industrial Average falling 43.65 to 5,668.74 by early afternoon. In Europe, stock markets fell in sympathy. In London the FT-SE 100, which reached an all-time high on Wednesday, finished the day down 33.7 at 3,885.

Fresh concern over faster US growth was reinforced by a second Commerce Department report showing sales of new single-family homes rose by 7.9 per cent to 783,000 in July. Sales were at their highest level for five months, despite mortgage rates at over 8 per cent.

The markets will now closely scrutinise employment figures for August, due to be released next week. If these show higher-than-expected job creation it could prompt the Federal Reserve to raise interest rates at its next open market meeting on September 24.

US GDP



Source: Datastream

"People had been half hoping that the Fed would not have to raise interest rates between now and the US election [in November] and they may have cause to rethink that," said Mr Michael Hughes, global strategist at BZW, the investment arm of Barclays Bank.

Despite yesterday's figures, most economists still expect a slowdown in US growth to between 2 and 2.5 per cent in the next quarter. The latest GDP update shows a slight slowing in consumer and capital spending, trends which are expected to continue.

Ms Debbie Johnson, an economist with ExcoFax in New York, said the growth had been led by productivity increases, which meant it was not inflationary. The Commerce Department price index tied to the GDP rose only 2.1 per cent at an annual rate in the second quarter, down from 2.3 per cent in the first quarter, when energy and food prices were temporarily accelerating.

Flemings group hit by $1m fine

Flemings investment banking group chairman Alan Smith pictured yesterday as the group faced embarrassment after regulators in London and Hong Kong imposed fines of £700,000 ($1,085,000). The group announced $19.3m in compensation to investors and disclosed that one of its top fund managers had diverted profitable trades to his own account.

Report, Page 10

Picture: Reuter

Russian agency for gem sales disbanded

By Chrystia Freeland in Moscow and Kenneth Gooding in London

The Russian agency which controls the nation's billion-dollar sales of diamonds and precious metals has been shut down, in a move that has sent jitters through the secretive industry.

The Committee for Gemstones and Precious Metals, known by its Russian acronym of Komdragmet, has been dismantled by a presidential decree not yet published in Russia.

The dissolution of Komdragmet, much of whose authority will be transferred to the ministry of finance, might make it easier for the Kremlin to dip into Russia's stocks of diamonds and gold to help cover shortfalls in the budget.

Russian and western business leaders are also concerned that the move could further disrupt the country's scandal-ridden diamond trade. But Mr Yuri Kotlyar, the former acting head of Komdragmet, yesterday said the change should not hurt the sector.

"This is not a tragedy," Mr Kotlyar said. "Our western partners should be calm. There will be no revolution in the

Continued on Page 10
Indian turmoil, Page 22

Baxter sets aside $68m for Immuno's HIV costs

By Daniel Green in London

Baxter International, the US hospital products company, has set aside SFr83m ($68.5m) to cover the potential cost of litigation by haemophiliacs against Immuno International, an Austria-based company for which it is paying SFr850m ($702m) cash.

The deal is Baxter's biggest acquisition in many years and comes as the company prepares to return to manufacturing by spinning off its US hospital supplies business.

Immuno manufactures blood products such as proteins used in blood transfusions, principally in Europe. Baxter is in the same business but is stronger in the US.

Both companies have been hit by legal action from haemophiliacs infected with HIV, the virus that causes Aids, from contaminated blood.

Other companies in similar litigation include Bayer of Germany, Green Cross of Japan and the market leader Centeon, a joint venture between Hoechst of Germany and Rhône-Poulenc Rorer, the US drugs company controlled by Rhône-Poulenc, the French chemicals company.

Settlements for those infected with HIV, mostly haemophiliacs who received blood transfusions, have been reached in the US and Japan but not in most European countries.

Earlier this month, a US federal court gave preliminary settlement between four companies, including Baxter, and US haemophiliacs worth about $600m.

Baxter Biotech, the division with which Immuno is being combined, had 1995 sales of $1.1bn. Immuno had sales of SFr626m ($517.30).

Baxter is to buy from the controlling shareholders of Immuno 162,000 bearer shares and 870,000 registered shares, representing 54 per cent of the voting and 37 per cent of the capital respectively.

Baxter will pay controlling shareholders SFr850 ($702.40) in cash for each bearer share and SFr141.67 ($117.00) in cash for each registered share.

Immuno's biggest shareholders are two European private investment vehicles, Pharminvest and Albenga Holding.

Baxter will tender for the 273,220 publicly traded bearer shares at SFr900 ($743.80) each.

Within three years of the closing of the deal – expected before the end of 1996 – Baxter will buy the remaining shares. Union Bank of Switzerland was financial adviser to Immuno and CS First Boston advised Baxter.

CONTENTS

News		Features		Companies & Finance		Markets			
European News	2	Leader Page	9	UK	14,15	Commodities	20	Money Markets	21
International News	4	Letters	8	International	12,13	FT Actuaries	28	Recent Issues	32
Asia-Pacific News	3	Management	18	Intl. Cap Mkts	20	FT/SP-A Wld Indices	32	Share Information	26,27
American News	5	Observer	9			Foreign Exchanges	21	London SE	28
World Trade News	3	Arts	7			Gold Markets	20	Wall Street	29-32
UK News	6	TV and Radio	7			Int. Bond Service	20	Bourses	29,32
Weather	10	Crossword	22			Managed Funds	23-25	**Surveys**	
Lex	10							Aerospace	Section II

Kremlin 'concern' over Chechen deal

By John Thornhill in Moscow

Efforts to reach a political settlement to the Chechen conflict met another stumbling block yesterday when a meeting of senior Russian officials concluded that "serious adjustments" would have to be made to peace proposals put forward by Mr Alexander Lebed, national security adviser.

Few additional details were forthcoming about the two-hour meeting, chaired by Mr Victor Chernomyrdin, the prime minister, and it was not clear what particular proposals lay at the root of the disagreement.

Russian news agencies simply reported: "Alexander Lebed's plan of action... in Chechnya needs a lot of work."

Later, Mr Chernomyrdin's press secretary said the prime minister was "extremely concerned" that the Chechen rebels were already forming executive bodies in some regions and threatening to prosecute countrymen who had collaborated with the Russians.

Mr Lebed, who attended the meeting, said he would travel to Chechnya today to hold further talks with the separatist Chechen leadership. He said he remained hopeful of agreeing the principles of a political deal. "The conflict must be settled by peaceful, civilised means."

Joint patrols continued in the regional capital of Grozny in an attempt to uphold the fragile peace. Russian troops continued to withdraw from the southern regions of the war-torn region under the terms of a military ceasefire sealed by Mr Lebed and the Chechen leadership.

But the withdrawal is drawing fire from some nationalists in Moscow who are depicting it as a humiliating capitulation to bandits.

President Boris Yeltsin, who has so far refused to meet Mr Lebed to discuss the Chechen situation, asked Mr Chernomyrdin to chair a meeting to discuss the basis of the peace plan.

The most likely cause of friction appears to be the constitutional status of Chechnya. Mr Yeltsin has repeatedly stressed he will not countenance Chechnya leaving the Russian Federation despite the rebels' demands for full independence.

Mr Gennady Seleznyev and Mr Yegor Stroyev, respectively speakers of the lower and upper houses of parliament, also attended yesterday's meeting, suggesting constitutional issues had been on the agenda. Mr Lebed has tried to fudge the precise status of Chechnya by suggesting a five-year delay in settling the issue.

General Anatoly Kulikov, the interior minister whom Mr Lebed has denounced as incompetent, was also invited to attend Mr Chernomyrdin's meeting and is unlikely to have missed the chance to counter-attack the security adviser.

Chrystia Freeland on gubernatorial and mayoral elections spanning 52 regions

Russians line up again for political marathon

After 70 years of dictatorship, Russia has thrown itself into democratic voting with a convert's frenzied enthusiasm. Following tempestuous parliamentary elections in December and an even more gruelling fight for the presidency this year, Russia is now at the starting line of yet another political marathon.

Elections for the governor of the southern Russian region of Saratov on Sunday will kick off the biggest experiment in local democracy in this vast nation's history.

From the Baltic enclave of Kaliningrad to the Pacific peninsula of Sakhalin, 52 provinces will elect governors for the first time and there will be mayoral races in 32 cities and elections to local legislatures in 24 regions.

The polls will be spread out over the autumn, dominating Russia's political calendar until the end of the year. Russian politicians see the regional elections as the final step in the country's turbulent march towards democracy.

"It will be the last stage in the develop of legitimate structures of political authority in Russia, of the first legitimate government we have had since the revolution of 1917," says Mr Vladimir Mau, one of Russia's leading democratic strategists. He, like many observers, believes the regional voting will give Russian one last chance to choose between communism and democracy.

"After the Communist victory in December parliamentary elections and the presidential victory in July you have a score of 1-1. It will be interesting to see who scores the final, winning goal," Mr Mau says.

Many of the political battles shaping up across the country – including Sunday's stand-off in Saratov – pit one of the president's men, usually the appointed incumbent governor, against a Communist rival.

In a further echo of the presidential elections, many local governors are using the same tools Mr Boris Yeltsin, the Russian leader, successfully deployed against his opponent. The incumbents are throwing the power of the state, especially a stranglehold on the media and control over local purse-strings, against the Communists, who have a strong regional network but little money.

But these superficial similarities with the winner-takes-all presidential contest in July threaten to obscure what could be the most important outcome of the regional voting. Just months after a struggle in which the Communist challenger was likened to Hitler and Mr Yeltsin was accused of Satanic connections, Russia's two most important political forces appear to be learning to compromise.

Quietly, at the regional level and in negotiations in Moscow, the president's administration and the Communist leadership are making deals. In some regions the Communists are agreeing not to mount too serious a campaign against Mr Yeltsin's incumbent, in exchange for a role in the regional power structure. In others, the president's men have all but conceded victory to the left, but are asking for a pledge of fealty to the president at decisive political moments.

"If the current governor is normal, if he is a good administrator, we will not oppose him," explains Mr Aleksei Podberiezkin, an activist who is one of the leading strategists of the defeated National-Patriotic bloc which backed the Communist presidential candidate. "Formally, we might run an opposing candidate, but he might not campaign very seriously. It will be like a football game with the result known in advance."

Mr Podberiezkin's rationale for this generosity is clear. He believes the regional elections will determine the membership of "the new Russian establishment", and Russia's most sophisticated Communists appear to have decided that, if they cannot beat the current rulers, they might as well join them.

It is a proposal Kremlin officials appear ready to accept. Mr Sergei Samoylov, head of territorial administration at the president's office, admits Yeltsin staffers have met the Communist leadership in Moscow in an effort to put together local deals.

Instead of the ideological battles of the past five years, the Kremlin and the Communists agree that the emphasis in these elections will be on choosing a good *khozayn*, a Russian term that falls somewhere between feudal overlord and efficient administrator. But, as Mr Samoylov is quick to point out, the *khozayn's* power is not absolute.

"A man who wants to run a region must understand that without the support of the president it will be impossible to do so," he insists, adding that the Kremlin will push the parliament to grant Mr Yeltsin the right to sack recalcitrant elected governors.

For the eager politicians vying to become local lords in 52 regions, it is a warning that, while the Kremlin may no longer demand ideological purity, Russia's would-be regional masters must still remember to bow to the nation's tsar.

Romania backs away from forex controls

By Virginia Marsh

In an apparent attempt to restore the credibility of its commitment to market-led reform, Romania has backed off from stringent foreign exchange controls that bankers had interpreted as requiring some companies to surrender export earnings.

Earlier this month – after the country began to experience energy shortages due to lack of hard-currency funds for imports – the central bank issued new regulations which, among other things, listed companies that were to pay energy utilities using foreign exchange gained from exports.

A state fund for energy imports was also set up to which exporters of wheat, timber and vegetable oil, as well as the state privatisation agency, would have to contribute.

The central bank now maintains the measures were misinterpreted. It said it had decided to set norms for the energy fund only using "market mechanisms" and only companies exporting subsidised products would have to surrender export earnings. It has also reaffirmed its commitment to full retention of hard currency holdings.

"Many of the companies on the list were already paying for energy in hard currency," a senior bank official said yesterday. "The regulations were only intended to recognise a situation that already existed. And, in any case, the norms we published did not specify any penalty for those that did not comply."

Analysts had criticised the move as deterring investors and further depressing exports – which dropped 11.7 per cent in the first seven months.

Bankers had also doubted the measures would work and said the hard currency shortages were a consequence of the government's decision to maintain the leu at an artificially high rate in an election year. This had encouraged currency hoarding and the black market.

Analysts welcomed the easing of the restrictions but said the episode had badly shaken confidence. "It's good that the authorities have recognised this was the wrong approach," a western banker said. "But the whole move was poorly planned and is yet another example of some fundamental economic mismanagement."

Officials said currency and energy shortages had eased after a \$104m domestic bond issue and a \$200m loan to energy importers.

A French cattle breeder makes his protest outside the Château de Versailles yesterday Reuter

French farmers' anger flares

French farmers staged a surprise protest yesterday, blockading main roads and motorway toll gates overnight, Reuter reports from Paris. They had threatened an "incendiary" end to the summer holidays but such was the secrecy with which the FNSEA farmers' union mobilised demonstrators by mobile telephone and fax that the first sign of the protest was when 15,000 farmers built barriers and started spot checks on trucks.

The protest – over falling beef prices because of the "mad cow" crisis – focused on trucks carrying imports from Britain or from outside the EU, especially cheap imports from eastern Europe which breeders say have helped force beef prices down by a third in recent months. The union said virtually all blockades had been dismantled by mid-morning. "There will be more union operations in the next few days if calls for help are not heard," said a union statement which demanded compensation and reform of the beef market.

In Laval, farmers unloaded veal in the streets, while protesters occupied local government offices in the Creuse region. Near Grenoble, 100 farmers occupied a slaughterhouse at Hieres sur Amby and found a truck carrying carcases of unspecified origin. Breeders from the Vienne drove their cows to Paris and plan to take them into the courtyard of the Elysée presidential palace today.

German concessions on monetary stability pact

By Samuel Brittan in Alpbach, Austria

Germany yesterday conceded that its proposed stability pact to squeeze budget deficits in the planned European monetary union could be relaxed for countries suffering exceptional economic hardship or natural disaster.

Detailing Germany's controversial plans for fiscal rigour among Emu member states, Mr Jürgen Stark, state secretary at the Bonn finance ministry, defined for the first time the exceptional circumstances in which countries could be allowed to exceed the 3 per cent budget deficit limit enshrined in the Maastricht treaty.

Mr Stark said allowance would be made if gross domestic product fell by an annualised 2 per cent rate over four successive quarters.

At a forum organised by the Austrian College, he said there would be a stocktaking in March of the outturn for the previous year and the prospects for the year ahead. This would be checked by a further ministerial meeting in September which would have more up-to-date data available. Germany is also prepared for exceptions to the 3 per cent rule in cases of severe natural disaster, such as earthquakes.

How far a country could exceed 3 per cent would depend on the severity of the recession and on the country's previous budgetary record. More tolerance should be shown for a country which had normally kept its deficit under 3 per cent and, in average years, not exceeded 1 per cent of GDP.

These tentative benchmarks apply to the period from 1999 when Emu is expected to be in operation. They do not affect the Maastricht criteria which a country would have to fulfil to be accepted as an Emu member at that time.

THE FINANCIAL TIMES
Published by The Financial Times (Europe) GmbH, Nibelungenplatz 3, 60318 Frankfurt am Main, Germany. Telephone ++49 69 156 850, Fax ++49 69 596 4481. Represented in Frankfurt by J. Walter Brand, Wilhelm J. Brüssel, Colin A. Kennard as Geschäftsführer and in London by David C.M. Bell, Chairman, and Alan C. Miller, Deputy Chairman. Shareholders of the Financial Times (Europe) GmbH are: The Financial Times (Europe) Ltd, London and F.T. (Germany Advertising) Ltd, London. Shareholder of the above mentioned two companies is: The Financial Times Limited, Number One Southwark Bridge, London SE1 9HL.
GERMANY:
Responsible for Advertising: Colin A. Kennard. Printer: Hürriyet International Verlagsgesellschaft mbH, Admiral-Rosendahl-Strasse 3a, 63263 Neu Isenburg ISSN 0174 7363. Responsible Editor: Richard Lambert, c/o The Financial Times Limited, Number One Southwark Bridge, London SE1 9HL.
FRANCE:
Publishing Director: P. Maraviglia, 42 Rue La Boétie, 75008 PARIS. Telephone (01) 5376 8254, Fax (01) 5376 8253. Printer: S.A. Nord Eclair, 15/21 Rue de Caire, F-59100 Roubaix Cedex 1. Editor: Richard Lambert. ISSN 1148-2753. Commission Paritaire No 67808D
SWEDEN:
Responsible Publisher: Hugh Carnegy 468 618 6088. Printer: AB Kvällstidningen Expressen, PO Box 6007, S-550 06, Jönköping

Editor: Richard Lambert, c/o The Financial Times Limited, Number One Southwark Bridge, London SE1 9HL.
R

Parting of Nordic neighbours' ways over Emu

Sweden and Finland, the neutral Nordic neighbours which two years ago marched in close step into the European Union, have suddenly taken divergent paths towards the planned European monetary union.

After years battling powerful Euroscepticism, which came close to derailing Sweden's EU entry, the Social Democratic government in Stockholm changed tack on Wednesday. Mr Erik Asbrink, the finance minister, signalled in a newspaper article that Sweden would not seek to be among the first members at Emu's scheduled launch in 1999.

By contrast, the Finnish government, a Social Democratic-led coalition, is adamant that Finland should be among the founding Emu members, maintaining that joining Emu at the start is vital to completing the country's full integration into the European club.

Ironically after all the problems Sweden has had in its public finances, Stockholm backed off Emu for political reasons. It is now confident of meeting the stringent economic criteria set for entry, despite having a state debt still well above target levels.

But opposition to Emu has remained stubbornly high since the narrow vote in favour of joining the EU in November 1994. Polls show less than 25 per cent of voters in favour.

The issue does not excite the same emotional debate as in Britain, but there is a clear majority opposed to Emu within SDP ranks. Opponents in parliament could force a referendum if the government pushed the issue, which the SDP is keen to avoid. Even with no referendum, the September 1998 general election would inevitably turn into an Emu-dominated poll, with potentially disastrous consequences for the party.

Mr Göran Persson, the Swedish premier, and Mr Asbrink have given way on Emu despite their belief that the advantages of membership outweigh disadvantages. Their move prompted a negative response from the financial markets, which pushed up interest rates. But the government has not entirely given in. The move was in part a tactical retreat, designed to avoid a permanent rejection of Emu and leaving open the chance of joining later.

On top of that, Mr Asbrink stressed he would have to pursue even tougher fiscal policies if Sweden stayed out of Emu. He said he would now aim for a permanent budget surplus – a clear signal to the SDP faithful that there can be no let-up in the current spending squeeze on the welfare state.

In Finland, the Emu issue is regarded very differently. The levels of opposition to the EU are, in general, lower – a function of the widely held view that full EU participation is a vital guarantee of security for a country that still fears instability across the border in Russia.

Mr Paavo Lipponen, the prime minister, insists it is crucial for Finland's long-term economic and political well-being to be in Emu. Helsinki has pursued an even tougher fiscal policy than Sweden in the past few years in its attempt to measure up, and is now preparing to join the European exchange rate mechanism as the next step. It has been rewarded by the markets, with long-term interest rates more than 1 point lower than in Sweden.

Mr Asbrink's signal of a Swedish delay will undoubtedly prompt louder expressions of doubt in Finland, where the economy is still strongly linked to Sweden. Not least, the big pulp and paper companies, still the backbone of Finnish industry, have warned they could be seriously undercut by Swedish rivals if they were tied to a fixed currency while the Swedish krona continued to float.

But to date Mr Lipponen has indicated he is ready to part ways with Sweden. "We have to make our own decision," he says.

Hugh Carnegy

EUROPEAN NEWS DIGEST

Iran angered by Berlin trial

Terrorism charges raised against Iranian leaders during a trial in Berlin could hurt German interests in Iran, the country's security chief warned yesterday. Germany is Tehran's main trading partner, but there has been tension over German officials allowing exiled former president Mr Abolhassan Banisadr to testify at a trial over the 1992 killing of three Iranian Kurdish rebel leaders and their translator in a Berlin restaurant.

Mr Banisadr, who fled after being deposed as Iran's president in 1981, angered Tehran last week by accusing, in court, Iranian leaders of ordering the killings. Iran dismissed the testimony as baseless and asked Bonn to extradite Mr Banisadr for alleged hijacking.

"We did not expect Germany to allow the trial to be diverted, and this would not be without effects on our relations with Germany and German interests in Iran," said Mr Ali Fallahiyan, Iran's intelligence minister. In March the German authorities issued an arrest warrant for Mr Fallahiyan on suspicion of ordering the assassinations. *Reuter, Tehran*

Airliner crashes in Arctic

All 141 passengers and crew members aboard a Russian Tupolev 154 aircraft were feared dead yesterday after it crashed into a mountain as it approached the airport on the Arctic island of Spitzbergen. Most of the victims were coal miners and their families returning from holiday. If all 141 are confirmed dead, the accident will be the worst involving a Russian aircraft this year.

The crash raises fresh fears about the safety of the scores of independent airlines which have emerged from the break-up of Aeroflot's domestic routes, although investigators suggested a snowstorm was probably responsible. Spitzbergen demands a high degree of skill from pilots, given the extreme conditions and minimal navigational aids. The Tupolev 154 is the mainstay of many Russian airlines. *John Thornhill, Moscow*

Bonn makes reform ground

Chancellor Helmut Kohl's government yesterday pushed its package of spending cuts and welfare reforms a step closer to becoming law by securing the backing of the Bundestag, the lower house of the German parliament, for the measures.

MPs from the ruling Christian Democrat, Christian Social and Free Democrat parties reversed Monday's decision of the special conciliation committee of both houses of parliament, which rejected the government's plans to cut sick pay, raise the retirement age for women and relax protection against dismissal for employees in small companies.

Just two legislative hurdles remain before the package can become law. Opposition-dominated state governments will challenge yesterday's Bundestag vote in a special session of the Bundesrat, the second chamber representing the states, on September 12. But the government will be able to overcome the states' objections if it can muster an absolute majority of Bundestag members for the package on September 13. *Peter Norman, Bonn*

US envoy warns Serb leaders

A senior US envoy yesterday warned Serb leaders that Bosnia's first peacetime elections should bring a unified country and not partition. The warning coincided with increasing unrest in Bosnia in the run-up to internationally organised elections on September 14.

Mr John Kornblum, assistant secretary of state, said Washington would keep pressure on Serb leaders to back the building of joint institutions, aimed at undoing their war gains by unifying Republika Srpska, the Bosnian Serb entity which administers 49 per cent of Bosnia, with the Moslem-Croat Federation. Mr Kornblum later headed to Zagreb to press Croat leaders to honour their pledge to dissolve Herceg-Bosna, their mini-state in Bosnia, by September 1.

Senior US diplomats admit they are worried about the prospects of violence during elections. Nato troops yesterday detained at least 35 Bosnian Serb policemen after gunmen fired on Moslem refugees returning to a Serb-held village on the border between the two entities. *Laura Silber, Belgrade*

EBRD first-half profits rise

The European Bank for Reconstruction and Development's operating profits for the first half of 1996 rose to Ecu45m (\$56.7m) from Ecu20.2m in the same period last year, on a 30 per cent rise in the value of signed projects to Ecu774m against Ecu628m a year earlier.

Banking operations rose to 39 per cent of gross income from 29 per cent a year ago, reflecting strong growth in new projects and disbursements. But with disbursements for the first six months rising to Ecu582m, from Ecu462m last year, and further rapid growth in outlay expected in the second half, the bank allocated virtually all operating profit to provision against losses, nearly double last year's first-half provision of Ecu23m. Some 65 per cent of outstanding loans are still in their grace period, underlining the need for a conservative provisions policy.

Administrative expenses at Ecu62.3m were below budget while total outstanding disbursements in the half amounted to Ecu2.5bn. Since its inauguration in April 1991, the EBRD has signed 317 projects, totalling Ecu6.5bn, in east and central Europe and the former Soviet Union. *Anthony Robinson, London*

■ German car registrations this year would be about 5 per cent higher than last year's level, the German motor industry association said yesterday. It expected car production to rise as much as 3 per cent but commercial vehicle output to fall 2 per cent. *Sarah Althaus, Frankfurt*

■ Dutch gross domestic product rose 2.8 per cent in the second quarter, from a year earlier, before seasonal adjustment, according to preliminary estimates. GDP was up 1.3 per cent from the first quarter on a seasonally adjusted basis.

■ Swiss consumer prices climbed 0.3 per cent in August from July and 0.6 per cent year-on-year.

■ Finnish unemployment was 15.9 per cent in July, down from 16.6 per cent in June and 17.3 per cent a year earlier.

Thailand likely to miss export target

By Ted Bardacke in Bangkok

Thailand is unlikely to reach this year's export growth target, the central bank said yesterday. This reflects a region-wide weakness in export industries, the result of damaging currency movements and falling demand from industrialised countries. Singapore, too, has warned of slower growth, and South Korea has forecast sharply reduced exports.

The bank reported that exports in July were only 5.2 per cent up year-on-year. It also revised down June's figures: from a 2.5 per cent rise to a 9.5 per cent fall.

The export target was lowered last month to 10.2 per cent, but yesterday's numbers show exports grew by only 3.8 per cent in the first seven months. Growth must average nearly 15 per cent for the rest of the year (a figure achieved in only one month so far) for the target to be reached.

The failure of export growth to pick up has put Thai economic policy-makers in a difficult position. Manufacturing activity, private investment, credit growth and corporate profits are slowing sharply but any easing of interest rates could bring its own problems.

"It's time for some policy easing as the real economy is slowing down," said Mr Neil Saker, senior economist with Crosby Securities. "But they can't go overboard."

He pointed to a balance of payments deficit of Bt17.1bn ($675m) in July, compared to a surplus of Bt20.5bn in June. This was a sign that short-term capital was leaving the country – a positive development from the central bank's point of view – but too much outflow could cause problems in funding the current account.

June's current account deficit was Bt34bn, down slightly from Bt35.5bn in May. July's trade deficit was Bt30bn, also down from June's revised figure of Bt35.5bn.

Ms Suchada Kirakul, from the central bank's economic research department, attributed the latter to low import growth, especially of consumer goods and raw materials for export goods. She said government policies were necessary to boost exports but warned that any rise in manufacturing exports would bring some rise in imports.

Despite the capital outflow, foreign currency reserves remained healthy at $39.4bn. However, the bank has spent more than $1bn during August defending the baht.

ASIA-PACIFIC NEWS DIGEST

Seoul deficit hits $11.6bn

South Korea's current account deficit soared to $11.6bn for the first seven months of 1996, exceeding a recent government estimate of $11.3bn for the full year. Officials blamed a sharp drop in semiconductor prices, which account for almost 20 per cent of total exports. July's current account deficit was the second biggest for the year, with exports falling 2.8 per cent to $10.3bn and imports climbing 11.7 per cent to $11.9bn.

Officials predicted the current account deficit could reach a record $15bn for the year. Inflation appears certain to exceed the government's 4.5 per cent target for the full year; prices increased 4.4 per cent in the first eight months. The central bank reported an unexpectedly sharp slowdown in gross domestic product growth to 6.7 per cent, the lowest rate in three years. Industrial output rose by an annual 8 per cent in July, compared with June's 3.8 per cent. *John Burton, Seoul*

Japanese store sales fall

Sales at Japan's large retail stores fell 4.1 per cent last month from a year earlier, the trade and industry ministry reported yesterday. The decline came after an increase in June, the first improvement in retail sales in three months. Overall, the trend remains mildly upward. Mr Tadashi Ogawa, finance vice-minister, dismissed fears that economic recovery was weakening, and again ruled out the need for an extra budget this autumn.

Wednesday's Bank of Japan survey of short-term economic prospects indicated the economy remained on a path to recovery, despite a fall in confidence among large manufacturers. Ruling coalition politicians are still likely to press for a supplementary budget, and it seems probable they will get their way. An election is likely within the next six months. Mr Ryutaro Hashimoto, prime minister, said any decision on the need for an extra budget will be made next month. *Gerard Baker, Tokyo*

Australian deficit widens

Australia's current account deficit widened slightly to A$1.26bn (US$1bn), seasonally adjusted, in July, against June's revised A$1.22bn. Merchandise exports fell 3.8 per cent to A$245m, while imports dipped 2.8 per cent to A$175m, leaving a seasonally-adjusted trade surplus of A$70m. The result was largely in line with analysts' forecasts and brought little reaction on financial markets. It was the second-best monthly figure since March 1994; most economists see Australia's current-account deficit running at an annualised A$20bn. *Nikki Tait, Sydney*

Court go-ahead for Megawati

An Indonesian court has allowed Ms Megawati Sukarnoputri, the embattled opposition figurehead, to proceed with her legal action against the government, after the two sides failed to reach an out-of-court settlement. The court yesterday adjourned the case for the third time until September 5. At yesterday's hearing, government lawyers presented their response to Ms Megawati's claim that the government and armed forces had backed an illegal congress of the Indonesian Democratic party which removed her as leader of the opposition party. Forced removal of her supporters from the party's HQ sparked some of the worst rioting in Indonesia in decades. *Manuela Saragosa, Jakarta*

Japanese Aids expert arrested

By Emiko Terazono in Tokyo

Japanese prosecutors raided offices of the ministry of health and welfare yesterday and arrested the country's top expert on haemophilia and Aids.

The widening scandal stems from charges that he knowingly administered untreated blood products to hundreds of patients. It was the first raid on government offices by state prosecutors since the mid-1980s.

Mr Takeshi Abe, who headed the government's advisory panel for Aids and was investigating the source of the infection in Japan, was arrested on professional negligence charges. More than 2,000 haemophiliacs in Japan have become infected with HIV, the human immuno-deficiency virus which can lead to Aids, from tainted blood products.

"The investigation will be difficult, but necessary for the public to regain trust," said Mr Naoto Kan, health and welfare minister. The raids follow investigations begun last week against Green Cross, a drug company specialising in blood products.

Prosecutors suspect that pharmaceutical companies, officials of the health and welfare ministry, and members of a government advisory panel delayed the use of treated blood products in the mid-1980s, despite knowing the risks involved in the use of untreated blood.

Ties that bind Chinese grow looser

Clan links that have enriched the Hokkien of south-east Asia are fading, finds James Kynge

"The secret," said the old man leaning across his rice bowl, "is the ability to eat bitterness" (endure hardship). His audience were guests at the 2nd Fujian World Convention, a gathering, on an island in northern Malaysia, of one of the Chinese diaspora's most successful communities. There were plenty of anecdotes and rags-to-riches stories.

Such as that of Mr Ling Liong Sik, Malaysia's ethnic-Chinese transport minister, who described how his grandfather had arrived from China with only shirt and slippers.

The organisers wanted the convention, held earlier this month, to be a display of unity among one of south-east Asia's most eminent overseas Chinese communities, the Hokkien. In the event, it said more about the community's fragmentation and the slow decline of institutions which have helped nurture some of the world's richest families.

The Hokkien, who trace their ancestry to China's south-eastern province of Fujian, control vast amounts of south-east Asia's corporate wealth. But the roster of those who sent apologies was more revealing than those who attended.

Mr Liem Sioe Liong, head of the Salim Group, which controls the majority of Indonesia's blue chip companies, said he was indisposed. Similarly, the Quek family, owners of the Hong Leong business empire in Malaysia. Mr Robert Kuok, whose Kuok Group controls the Shangri-la hotel chain, and has several other business interests, was also absent.

Some local Hokkien tycoons did put in an appearance. There was Mr Lim Goh Tong, head of the Genting casino empire, and Mr Ting Pek Khiing, one of the up-and-coming millionaires, whose company, Ekran, is building south-east Asia's largest hydroelectric dam in the forests of Borneo.

But they were exceptions. The truth is that the Hokkien community's wealthy members no longer need the support of the traditional mutual help networks.

"The old networks are dying," said Mr Tan Kim Leong, secretary general of the Federation of Hokkien Associations of Malaysia, probably the region's largest grouping of overseas Chinese. "This federation is just a remnant of the past. What we did before is out of date."

Overseas Chinese associations, or *huiguan*, are a feature of almost every village, town and city in Malaysia. Their now crumbling buildings generally stand in a prominent place on the main street and, in times past, their committees comprised the community's most influential men.

The *huiguan* were involved in most aspects of life: they granted scholarships, organised cultural events, held property, sheltered and fed the poor, and granted modest loans to help people get started in business. In the early decades of this century, they were a lifeline for waves of refugees fleeing China's political convulsions.

In the mid-1980s, the associations took on another important role: they provided introductions to thousands of overseas Chinese businessmen who were drawn to invest or trade as China opened its economy.

The ties of family, language and culture which each association had with a certain province or area in China put the people they introduced at a distinct advantage over other foreign businessmen.

Most of the investment in China's Fujian province has come from overseas Chinese, and the role played by the Hokkien network of associations has been significant. In recognition, the Fujian provincial government sent a high-level delegation to the convention.

But there was no escaping the fact that it was small businessmen, not the high rollers, who made up the convention's numbers.

"China trade and investment is so sophisticated and so common that you would be much better off with a merchant bank than by using the clan network," said one businessman. "The big tycoons now have their own networks, anyway."

The *huiguan* are also finding themselves increasingly marginalised in the communities they used to bind. For instance, one association for Teo Chew Chinese from the southern China city of Chao Zhou stands opposite the Standard Chartered Bank in Kuala Lumpur. Large black Chinese characters lend the building a sense of importance but, inside, the auditorium is strewn with paper lanterns and a few old opera costumes.

Only in Penang, the prosperous island off Malaysia's north-west coast, do the associations still play a crucial role in local commerce.

Mr Yap Kian Lam, chairman of the Hokkien Hui Guan in Penang, said about 90 per cent of local Hokkien people were members. Like many others at the convention, he said Hokkien frugality and diligence had been the bedrock of their success. But he was concerned that the younger generation were not only setting less store by the associations which ordered their parents' lives, but they were also losing the habit of thrift.

Apec to help power investors

By Nikki Tait in Sydney

Apec energy ministers have agreed to encourage private investment in power infrastructure in the Asia-Pacific region to help meet spiralling demand for electricity.

The ministers from the 18 nations in the Asia-Pacific Economic Co-operation forum, meeting in Sydney, said the "challenge for governments of member economies is to find ways to reduce risks, and hence costs, for the business sector to invest in power infrastructure".

The region's demand for electricity is forecast to rise by 50 to 80 per cent by 2010, requiring investment of $1,600bn in infrastructure. Multilateral agencies, such as the World Bank, are unlikely to be able to supply more than a small portion of these funds.

The meeting called for consideration of a progressive reduction in energy subsidies, and the promotion of pricing practices which reflect the economic cost of supply and using energy across the full energy cycle, including environmental costs.

However, Mr Warwick Parer, Australia's energy minister, who chaired the meeting, said afterwards that, while there had been some discussions on whether this liberalisation timetable could be pursued more quickly than the general Apec targets, ministers had postponed any decision.

"There is an Apec timetable, and we discussed whether we could go quicker in energy materials," he said. "What came out of those discussions was that... one or two economies would like to give it further consideration."

The meeting's final statement also put considerable emphasis on the region's desire for security of supply. Although Apec includes some big exporters of energy-related products – including Canada and Australia – it is overall a net importer.

US assails British tactics in 'open skies' negotiations

By Michael Skapinker, Aerospace Correspondent

Recriminations over the collapse of UK-US aviation talks continued yesterday, with a senior Washington official accusing Britain of engaging in "narrow, tit-for-tat bargaining".

Mr Mark Gerchick, US deputy assistant transportation secretary, told the FT World Aerospace conference in London that Britain's demand that the US open its domestic air market to foreign competition was a "red herring of little economic significance" and had been raised "simply to create a difficulty".

The US earlier this week called off planned negotiations, saying British proposals fell far short of what was required to conclude an "open skies" agreement.

Robert Ayling: defending BA slots at Heathrow

The US has made such an agreement a precondition for approving the planned alliance between British Airways and American Airlines.

The two governments differ over whether US airlines should be granted the right to fly to third countries from the UK and whether British carriers should be allowed to carry passengers domestically in the US. Virgin Atlantic, the UK carrier, is keen to set up a domestic US service under its own name, possibly by investing in an independent US airline.

Washington also objects to British proposals for a tribunal to monitor predatory pricing, seeing this as a way of reintroducing government control over fares.

Mr Gerchick said the UK would have to provide market access to US airlines, "not only *de jure* but *de facto*, including at congested airports". This was a reference to London's Heathrow, to which US airlines are demanding greater access.

He added, however, that the administration backed one UK demand: lifting the ceiling on foreign ownership of US airlines from the present level of 25 per cent to 49 per cent.

Mr Robert Ayling, BA's chief executive, said the BA-American alliance was a test of whether the airline industry was ready to throw aside national constraints and establish multinational companies, as in the motor and pharmaceutical industries.

The problem of the shortage of take-off and landing spaces at airports such as Heathrow, he said, could be solved by airlines buying and selling slots.

Mr Ayling indicated BA would strongly resist any attempt to force it to give up Heathrow slots. He said: "Confiscation is wrong, irrational, unfair, potentially corrupt and against the public interest."

Canadian company in Kazakh oil deal

By Sander Thoenes in Tashkent

Hurricane Hydrocarbons, a small Canadian oil company, has bought a big oil producer in Kazakhstan with proven reserves of 650m barrels.

Mr John Foley, a consultant to the government for Price Waterhouse, said Hurricane pledged to pay $120m, invest $280m and pay off debt for a 90 per cent stake of Yuzhneftegaz Production Association, which holds the licence to the Kumkol oil field in central Kazakhstan.

The sale is the second in a series of three open tenders for oil industries in Kazakhstan, but none has so far attracted more than two bidders.

The Dutch oil trader Vitol bought the Shimkent oil refinery earlier this summer, and Exxon and Texaco are expected to bid next month for the Aktyubemunaigaz oil production association, which holds the licence to the Zhanazhol fields.

In a separate, closed tender, Unocal of California and two other companies are expected to bid tomorrow for Uzenmunaigaz, which holds the licence to the Uzen field in western Kazakhstan.

Mr Saribay Kalmurzayev, chariman of Kazakhstan's state property committee, said the state would earn $530m in royalties and $1.7bn in tax revenues from the deal over the next 20 years.

Hurricane initially lost out to its competitor, the much larger US oil company Samson International, but Samson and the government failed to agree on payment schedules, and rights to existing production ventures at the fields.

Similar disagreements delayed the agreement with Hurricane as well; Mr John Komarnicki, Hurricane's president, said that the government wanted Hurricane to make its first payments early to allow a quick transfer of management control.

The field has about 150 producing wells but the oil is very waxy and has to be mixed with Russian crude before it can be pumped to the Shimkent refinery in southern Kazakhstan, leaving Yuzhnestegaz hostage to Moscow's whims.

Far from any port, the oil is destined for the Kazakh market, where rates are still well below world levels.

Indonesia's national car drives into trouble

The arrival of the first ones is likely to prompt a WTO complaint, writes Manuela Saragosa

It is a fairly safe bet that Mr Hutomo Mandala Putra was not standing at the docks in Jakarta yesterday to meet the first shipment of Indonesia's "national" cars unloaded from South Korea. While the sale of each car is expected to bring Mr Hutomo, as head of the car project, several thousand dollars, his father, President Suharto, faces the far higher cost of a threatened WTO investigation.

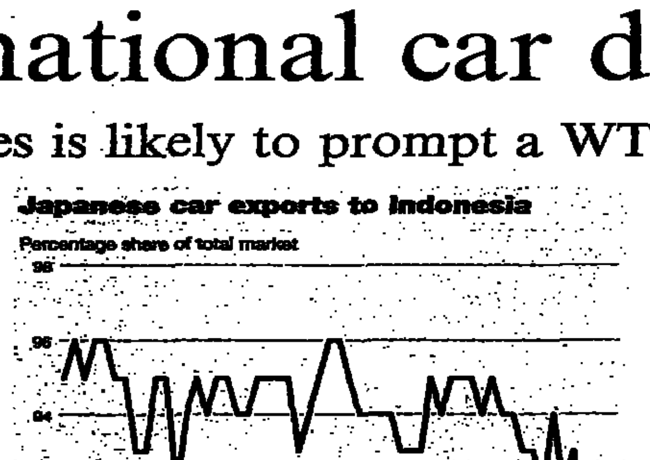
The arrival of the cars has turned attention to the Japanese, who have threatened to drag Indonesia to the World Trade Organisation. And if the Japanese shy away, the US and the European Union – which have also criticised the car policy for breaching WTO rules – may step in instead. "The arrival of the cars is expected to trigger events," says a western diplomat in Jakarta.

The Japanese dominate Indonesia's car market and they stand to lose most under a policy which gives a company controlled by Mr Suharto's youngest son tax and tariff breaks to manufacture the "Timor" national car in co-operation with Kia Motors.

From the US and European standpoint, the issue is one of principle. The car policy is believed to breach a WTO "standstill" agreement under which Indonesia promised not to add rules to the tariff and tax structure for its automotive industry and threatens to violate a WTO article which stipulates that imports cannot be treated differently from locally manufactured products.

The Timor is being allowed to be imported duty-free because Mr Hutomo does not yet have a factory in Indonesia to manufacture cars.

Not surprisingly, that has engendered little sympathy with established investors who are subject to a heavy and complicated tariff regime for car components and will find it difficult to compete against the 1,500cc "national" car's price of Rp35m ($14,900).



Since Indonesia unveiled its "national" car policy in March, the ministry of trade and industry has been talking with counterparts in Japan and the US in an attempt to dissuade them from starting WTO proceedings. But diplomats in Jakarta say the meetings have been "inconclusive".

Observers say one reason the issue has not yet reached the WTO is because Mr Hutomo's project is widely expected to fail. Timor Puta Nasional, the company licensed to produce the national car, may import 24,000 cars duty free until March next year by which time it is expected to have manufacturing facilities in place in Indonesia.

Under the conditions stipulated by the government, to maintain tax and tariff breaks the Timor car must meet a 20 per cent local content requirement by September 1997 and local content must rise to 40 per cent by the end of the second year and 60 per cent by the end of the third year of production.

But Timor Putra Nasional may find it difficult to achieve the 60 per cent requirement, given the lack of development of the domestic components industry, says Mr Steven Rogers, analyst at UBS Securities in Jakarta.

Analysts note that it has taken years for even established foreign car manufacturers in Indonesia to meet local content requirements which give them tariff breaks on imported parts.

For example, Japan's Toyota has made the country's most popular model – the Kijang – since 1977. The commercial vehicle only reached the 40 per cent local content target enabling it to take advantage of tariff breaks on imported parts at the start of the 1990s.

Meanwhile, Mr Tunky Ariwibowo, the trade and industry minister, has said the first batch of Timor cars will not be cleared through customs unless Timor Putra Nasional provides the government with a bank guarantee equal in value to the waived import duties on the cars.

The move is ostensibly aimed at forcing the company to meet the 20 per cent local content requirement by September next year or face the prospect of paying import duties retrospectively. But few analysts expect government regulations to be enforced on the matter because of Mr Hutomo's political weight. "They're just buying time because they know the matter is headed for the WTO after the cars arrive," says one diplomat.

Mr Ircham, corporate public relations officer at Mr Hutomo's company, says the bank guarantee is being processed now, with financing for the shipments having been generated internally in the company and the arranger being the state-owned Bank Bumi Daya.

"We ask for just three years [for the government to let us develop this car], which compared with the 20 years that this market has been open to other makes is not much," says Mr Mr F.H. Eman, chairman of Udatinda, Timor Putra Nasional's designated assembler.

"If the Timor is not accepted in that time, of course we will be phased out," Mr Eman says. But if the Japanese, the Americans and Europeans follow through their threats and criticisms, Mr Hutomo may find his car is phased out much sooner.

Zimbabwe strikers offered big rise

By Tony Hawkins in Harare

Zimbabwe's government was yesterday forced into an embarrassing climbdown in its dispute with striking civil servants, offering an extra 20 per cent pay rise, but union leaders said there would only be a return to work if dismissal notices were revoked.

Ministers were clearly hoping the cabinet's U-turn would end the paralysing week-long stoppage, but the unions demanded the reinstatement of all workers, a pledge of no discrimination against strike leaders and full pay for the duration of the strike.

The government had threatened to dismiss all public servants who failed to report for work last Friday, sending dismissal notices to more than 7,000 of the 180,000-strong civil service.

The unions have not yet accepted the extra 20 per cent, which will give most civil servants a total increase of between 28 per cent and 29 per cent, saying that they still want a higher cost-of-living increment. However, they have agreed to go back to work while negotiations continue, provided their reinstatement and no-discrimination demands are met.

Involvement of the Zimbabwe Congress of Trade Unions, which had threatened to call a general strike from next Monday, may have forced the government's hand. The news blackout by the state media on the strike was lifted yesterday, with the Daily Herald newspaper reporting an adjournment debate in parliament at which many government backbenchers had supported the strikers.

The official climbdown was expected, but the size of the award came as a surprise. If the 20 per cent award is accepted it will add $170m to a projected 1996/97 budget deficit of $680m. The award is equivalent to 2 per cent of GDP and would raise the forecast fiscal deficit to 10.5 per cent from the original 8.5 per cent estimated in the 1996 budget a month ago.

The strike settlement may force Harare into the hands of the IMF sooner than had been expected though the Fund's recipe for the fiscal crisis – larger spending cuts and accelerated privatisation – would be hard to swallow politically.

Turkey-Iran gas pipeline triggers US alarm bells

By John Barham and Bruce Clark

The government of Mr Necmettin Erbakan, Turkey's first Islamist prime minister, is sending out some sharply conflicting foreign policy signals – in the hope of satisfying a huge variety of constituencies, at home and abroad.

On Wednesday, Mr Erbakan pledged to do everything possible to reactivate lagging economic ties with Libya, which have suffered because of the North African country's $200m debt to Turkish creditors.

But on the same day as he threw out this latest challenge to Washington's effort to isolate "pariah" states, Mr Erbakan's government quietly signed a defence industry co-operation agreement with Israel.

The accord was signed in spite of pleas from Iran, where Mr Erbakan recently paid a high-profile visit, for an end to Turkey's ties with the Jewish state.

US officials involved in handling Turkey have quietly hailed the maintenance of defence links with Israel as a sign that the Islamist-led government will preserve a pro-western policy, despite radical rhetoric.

Another such sign, the officials note, is the fact that Turkey has agreed to continue hosting the western military aircraft which enforce a no-fly zone over northern Iraq.

These pro-western moves have helped to blunt the US administration's objections to the $23bn deal to export Iranian gas to Turkey that was announced amid some fanfare by Mr Erbakan earlier this month.

On the face of it, the deal was a body-blow to US efforts to induce its allies to isolate Iran. But privately, US officials question whether the deal to build a 1,320km "friendship pipeline" between Iran and Turkey will be implemented. Washington will use its influence to minimise the chances of the project attracting finance.

The pipeline also faces formidable technical and engineering challenges, according to Mr Henry Rich, an energy analyst at brokers Wood Mackenzie.

Turkey's rapprochement with Iran has also met a restrained reaction in west European capitals. Mr Klaus Kinkel, the German foreign minister, has described Ankara's dealing with Tehran as "normal diplomatic relations, with which we have no right to interfere".

Britain, while more critical than France and Germany of Iran's behaviour, also takes the view that "we have no grounds to oppose" Turkish-Iranian economic relations, according to one UK official.

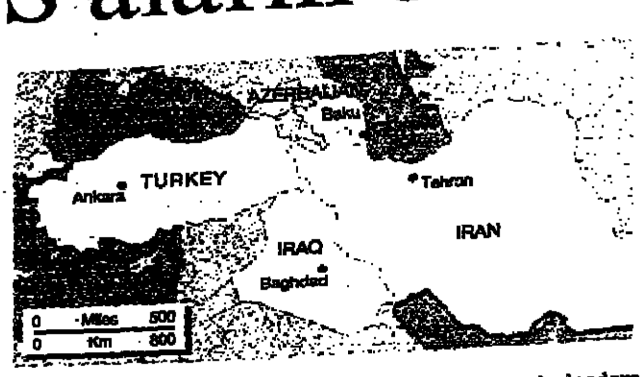
However observers of the region say it is still far from clear whether the US administration can succeed in its effort to limit the diplomatic and political damage from the advent of an Islamist-led government in Ankara.

Whether or not the Turkish-Iranian gas deal is implemented, it has triggered alarm bells in the US media and foreign policy establishment – and among Republicans who are looking for flaws in the administration's external record.

Mr Richard Perle, an influential defence expert who now advises Mr Bob Dole, the Republican presidential candidate, has accused President Bill Clinton of driving Ankara away from the western camp through his "indifference" to Turkish concerns.

While a US debate on "who lost Turkey" could work to Ankara's advantage, observers say, it would certainly wreck the chances of Turkey's relationship with Iran being politely ignored in the west.

From the US viewpoint, at least one worrying development has already been speeded along by the new Turkish foreign policy. The oil-rich republic of Azerbaijan, where the US has worked to gain influence, is apparently following the example of its ethnic cousins in Turkey and mending fences with Iran. Mr Hasan Hasanov, Azerbaijani foreign minister, told Iran's leaders this week that he wanted to "get rid of possible hindrances" in bilateral ties. While the US has forced Azerbaijan to exclude Iran from an $8bn oil project – the biggest in the Caspian – the Azerbaijanis did agree in June to give Iran a 10 per cent share in a $4bn drilling effort.



A Palestinian reads a paper outside his Jerusalem shop during the strike which closed most Arab premises yesterday Reuter

Bid to cool Palestinian anger

By Ilene Prusher in Jerusalem

Tension eased slightly yesterday as Israeli and Palestinian negotiators pledged to continue the Middle East peace process – after a four-hour general strike called by Mr Yassir Arafat, president of the Palestinian Authority, had been widely observed in the West Bank and Gaza.

But unidentified gunmen opened fire on an Israeli bus near Bethlehem, wounding two people. And further clashes are likely today if Palestinian Moslems without permits to enter Jerusalem heed Mr Arafat's call to attend Friday prayers at the city's al-Aqsa mosque.

The call is intended as a further protest against recent Israeli moves to bolster Jewish settlements in the West Bank and to demolish Palestinian offices in East Jerusalem.

The negotiators – General Dan Shomron, Israel's former army commander, and Mr Saeb Erekat, Palestinian local government minister – agreed to resume regular meetings next week. But Mr Erekat defended his leader's controversial call to prayer.

"I think people should be entitled to worship in Christian and Moslem holy places in Jerusalem, and we have been encouraging the Israeli government to lift this siege around Jerusalem," he said, referring to restrictions on Palestinian West Bank residents entering the city.

A further effort to keep the peace process alive was to be made last night at a meeting between Mr Dore Gold, foreign policy adviser to Israel's right-wing prime minister, Mr Benjamin Netanyahu, and his Palestinian equivalent, Mr Mahmoud Abbas.

But even as Israeli negotiators were promising to smooth out "misunderstandings", their government provoked new Palestinian anger by announcing plans for yet more housing in Jewish settlements on the West Bank. Israeli media put the number of new units planned at 2,000-3,500.

The UK and Jordan criticised the Netanyahu government's moves to increase Jewish settlements, as did the Israeli Labour party, which lost power to Mr Netanyahu's Likud bloc in last May's general election.

The British Foreign Office, describing the settlements as "illegal and an obstacle to peace", called on both sides "to avoid taking precipitate actions which could throw the peace process into a downward spiral".

Editorial comment, Page 9

Paris Club threat to debt initiative

By Robert Chote, Economics Editor

The World Bank and International Monetary Fund have drawn up detailed proposals for their $5.6bn initiative to tackle the debt of the world's poorest countries. But officials say hopes of early agreement on the plan are being threatened by the "Paris Club" of creditor governments.

The initiative aims to free up to 20 poor countries, mostly in Africa, from the burden of unsustainably high debt repayments. The World Bank and IMF want Paris Club governments to raise the 67 per cent debt relief already offered to eligible countries under the "Naples terms" (agreed by the Group of Seven leading countries) to as much as 90 per cent. The World Bank, IMF and other multilateral lenders would then offer relief on any money owed to them to reduce the country's overall debt burden to a sustainable level.

The G7 agreed at their June summit in Lyons that the scheme should be finalised by the time of the IMF and World Bank annual meetings late next month. But IMF and World Bank officials fear the Paris Club is becoming a serious obstacle to meeting this timetable: it has yet to say whether, or on what terms, it would be prepared to contribute.

Another lingering problem is disagreement about how the IMF should finance its contribution. Germany is leading resistance to a proposed sale and reinvestment of IMF gold reserves.

However, the initiative received some fresh momentum earlier this week, when the first full details of its proposed mechanics – including case studies of its application to Uganda and Nicaragua – were circulated to IMF and World bank board members for discussion early next month.

These embody greater flexibility than earlier proposals. For example, the six-year track record of good behaviour previously demanded before countries become eligible for extra debt relief can now be reduced to take account of past performance. The latest proposals also allow greater flexibility in assessing how countries on the borderline of debt sustainability could participate.

Social reforms and the reduction of poverty levels are also suggested as a possible condition for participation, alongside macroeconomic performance and structural economic reforms. "Among the possible social programmes that could be monitored are the allocations within the total education budget and total health budget to basic education and primary health care," the document suggests. It also says the IMF might provide grants rather than further loans.

Mr Justin Forsyth, at Oxfam International, the development lobby group, said that the latest proposals represented an important advance. But he warned: "The whole debt initiative is in danger of ending up as an empty charade if the Paris Club and IMF don't make immediate progress."

South Africa gives blacks a bigger stake in economy

Roger Matthews gives the background to Anglo's assets sale

There was much handshaking and backslapping on the top floor of Anglo American's Johannesburg headquarters on Wednesday night as negotiators celebrated the biggest sale of corporate assets from white to black in South African history.

For Anglo it was the culmination of a 29-month process since the country's largest conglomerate announced it was offering its nearly 48 per cent of Johnnic, an industrial and media holding company, to widely representative black interests.

Anglo made clear that though the offer was designed to give the black community a larger stake in the economy, it was not a charitable sale, as the price subsequently demonstrated, nor was it intended to allow a few to become rich quickly.

Putting together such a deal was as complex and time-consuming as Anglo's directors feared. The challenge was not just to negotiate a deal, but find a consortium of black interests which could both raise the necessary finance, and work harmoniously together.

When President Nelson Mandela announced in April that Mr Cyril Ramaphosa, secretary-general of the African National Congress, was leaving politics to pursue a business career, it was presented as strategic move by the ruling party.

"If black economic empowerment does not become a reality, successful transition from apartheid to democracy will be in jeopardy," Mr Ramaphosa said. "Then everyone loses, including white business."

He admitted he knew little about business, but it was his considerable negotiating skills that were in demand. The National Empowerment Consortium (NEC), which is to take control of Johnnic and provide 10 of its 20 board members, groups some 50 interests. These range from New Africa Investments, of which Mr Ramaphosa is deputy chairman, through Worldwide Africa, headed by Mr Wiseman Nkuhlu, to trade unions and smaller companies.

They now have 60 days to come up with the R1.5bn ($333m) to acquire the initial 20 per cent stake. In that time, they will be talking to the companies which make up Johnnic, whose activities include brewing, car making, pay-television, food, pharmaceuticals, property and newspapers.

Staff have been given reassurances on employment, at least in the short term, but Mr Ramaphosa has made it clear that NEC is interested in much more than ownership. It also wishes to manage.

The ideas it has for adding value to Johnnic, which has just reported a 41 per cent increase to R489m in equity-accounted earnings in the year to June 30, will take time to emerge.

NEC members stressed yesterday that many of the companies they would acquire were operating successfully. There would be no hurry to make management changes, but they would wish to appoint some of their own staff.

The NEC has to move cautiously; some 18 months lie ahead before it can exercise the option to acquire a further 15 per cent of Johnnic, plus 6 per cent more which will be sold on to the consortium's smallest members and the public.

Its approach to Johnnic's media interests will be closely watched. Senior ANC members, including Mr Ramaphosa, have long felt the need for a newspaper more accurately to reflect their views, and have not tried to hide their anger at the editorial stance of the publications they are now acquiring. For some, acquisition of Johnnic's media subsidiaries is the biggest prize.

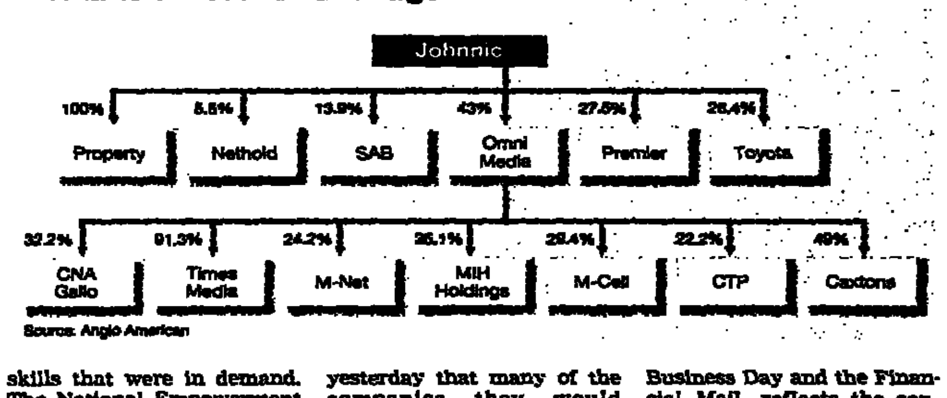
Mr Ramaphosa says the new owners will respect editorial independence, but rejected the need for any "contractual undertaking" at this stage. Anglo's eagerness for Pearson, the British media group which owns the Financial Times, to take a stake in two publications, Business Day and the Financial Mail, reflects the concern about NEC's longer-term ambitions.

No less interesting will be the involvement of the trade unions, whose pension funds will be contributing to the R1.5m needed for the initial share purchase. The Congress of South African Trade Unions (Cosatu) has notably failed to keep pace with the government's cautious conversion to market economics.

It is hostile to privatisation, and sees state companies as a vital tool in the struggle to promote black interests. If, and how, it will involve itself in the management of private-sector companies should emerge in the next two months as the relationship between the different NEC parties is put on a more formal basis.

For the investing public, the most reassuring aspect may be that none of the participants can let the new owners fail. As the biggest, and by far most politically loaded sale of assets to black owners, success is vital. If extra help is needed, the government has indicated that when awarding contracts it will look favourably at black-owned companies.

Johnnic's effective holdings



Source: Anglo American

Architect of president's strategy quits

By Patti Waldmeir in Chicago

The architect of the political strategy which has given President Bill Clinton a commanding lead in the race for the White House resigned last night in response to a tabloid news story alleging he allowed a prostitute to eavesdrop on a presidential phone call.

Mr Dick Morris has been a powerful influence over the president in recent months, persuading him to abandon some cherished liberal positions to place himself firmly in the centre of the political spectrum.

That approach, based on extensive opinion polling, has let the president and the Democratic party make a comeback after the Republican victory in the 1994 Congressional elections. Time magazine wrote its cover story this week about Mr Morris, under the title "The man who has Clinton's ear".

But it has led to arguments with some of the president's more liberal advisers, notably Mr Leon Panetta, White House chief of staff, and Mr Harold Ickes, deputy chief of staff. Mr Ickes has made public his disagreement with Mr Morris over the president's recent decision to sign a welfare reform bill criticised by liberals, but urged by Mr Morris.

The strategy pioneered by Mr Morris came to be known as "triangulation", described as an attempt to create "a dynamic centre not in the middle of left and right but way beyond it".

Mr Morris argued the president could reach this centre point, which polling showed would prove popular with voters, by moving to the right and appropriating the Republican agenda on issues such as welfare reform.

This approach put Mr Clinton at odds with more liberal Democrats, and gave rise to charges he was a political opportunist, adopting policies with an eye to campaign advantage rather than principle. The fact Mr Morris had previously worked as a consultant to Republican candidates appeared to give substance to these charges.

The circumstances surrounding Mr Morris' resignation could prove an embarrassment to the president, who has stressed the importance of "family values" in his election campaign, largely at Mr Morris' insistence.

A story in yesterday's New York Post alleged Mr Morris had a long affair with a prostitute, showing her advance copies of speeches delivered by Mrs Hillary Clinton and Vice President Al Gore.

Vice president gives prosaic recitation of US administration's policy record

Gore leaves 'vision thing' to Clinton

The old cliché did apply to Mr Bob Dole two Thursdays ago in San Diego. The newly crowned Republican presidential candidate faced "the most important speech of his career" and if he was not exactly memorable he did not flunk the test either.

No comparable sword of Damocles hung over President Bill Clinton's head in Chicago last night as it had, arguably, in New York four years ago, when he still needed to stamp his imprint on his party and the country.

This speech from the throne to a Democratic gathering that has been more coronation than convention was merely a continuum in the steady torrent of words, ideas and thoughts flowing from this most verbally fluent of presidents.

More than that, to borrow another cliché from his favourite pastime, the ball was teed up for his address accepting the nomination by just about every other convention speaker, none more so than Vice President Al Gore on Wednesday night.

Junior members of the ticket normally do not get the third night of a convention mostly to themselves. That Mr Clinton gave Mr Gore this honour is a fair tribute to their good working and personal relationship in which the vice president complements but does not threaten to upstage the president.

Mr Gore obliged by relieving Mr Clinton of one burden – the prosaic recitation of the administration's policy record. He ran through the long litany of bills covering family leave, student loans, portable health insurance, safe drinking water, handgun control and much more besides.

That should leave Mr Clinton free to focus more on his vision for a second term as well as for new policy initiatives such as he has been unveiling every day on his train trip to Chicago. Last night's expected proposals included more borrowing from the Republican playbook, including capital gains tax breaks for homeowners and tax incentives for businesses who hire welfare recipients.

Mr Gore also stuck to the convention script by telling the sort of "personal story" – the death of his tobacco-addicted sister from cancer – that is sure to feature in the president's address. "It has been a long time," the vice president said, "since we've had a president so in tune with ordinary lives."

Mr Gore and Senator Chris Dodd of Connecticut, in his speech placing Mr Clinton's name in nomination, also gave, more than a foretaste of how the Democratic ticket will take on the Republicans over the next 10 weeks.

There will be no unprovoked personal Dole-bashing. "He is a good and decent man," Mr Gore said. "Only the unknowing would deny him the respect he deserves." The personality and policies of Mr Newt Gingrich, the Republican Speaker, will, however, be fair game.

Vice President Al Gore waves to delegates before his speech to the convention *Reuter*

Mr Dodd's argument was on the need to "restore civility to America's political discourse". Americans, he said, "are fed up with relentless assaults on people's reputations."

Mr Dole's age, 73, will also be left alone, except by artful implication. Mr Gore put it this way: "In his speech from San Diego, Senator Dole offered himself as a bridge to the past. Tonight Bill Clinton and I offer ourselves as a bridge to the future."

More pointedly, he went on, "it is easy to understand the nostalgic appeal of the party of memory and the men who lead it. But let there be no doubt. The future lies with the party of hope – and with the man from Hope [in Arkansas] who leads it."

President George Bush called this "the vision thing" in acknowledging his own deficiencies at articulating it. Mr Dole, in comments from California, asserted that the Republicans had "the vision" (mostly lower taxes and more economic growth) and that the president, whom he described as "without principle," was reduced to stealing from it.

But for Mr Clinton, as eclectic a politician as any in the past 50 years, vision is mother's milk, much as "broad sunlit uplands" and "the shining city on a hill" were President Ronald Reagan's.

Four years ago, his visionary mantra was of "change". Now it is more sober-sided, featuring catchwords like "community" and "personal responsibility and accountability".

On the 21st Century Express en route to Chicago, he found a way to relate his topic of the day – education, crime, the environment – to the future of today's children. That has been the overriding convention theme and it would be logical for Mr Clinton to put the seal on the week in similar vein.

He might also borrow a sentence or two from his recently published book, itself more of an extended speech than a political treatise. One passage seems very relevant in the contest against a Republican party committed to much devolution of power from Washington to the states and the private sector.

"My vision does not seek to promote government but to perfect it, to make it a better servant of our people," Mr Clinton writes. "It doesn't seek to demean the free marketplace, but to strengthen it and to take account of what it cannot be expected to do."

On Tuesday former governor Mario Cuomo of New York urged delegates to "forget about new Democrats, old Democrats, conservative Democrats, liberal Democrats and neo-Democrats" and re-elect Bill Clinton. It is a fair bet that the president had all of them in mind in drafting his speech yesterday.

Jurek Martin

Wildfires consume forests and funds across the west

By Christopher Parkes in Los Angeles

One of the worst US summer wildfire seasons on record has so far blackened almost 5m acres across the west, drained firefighting funds and manpower reserves, and fuelled smouldering disputes over forest management.

Hundreds of blazes, mostly sparked by lightning, have swept the region since late June, consuming three times the area burnt at this point last year.

Mr Bruce Babbitt, interior secretary, is to ask Congress for funds to top up budgets currently being depleted by up to $3m a day.

The Los Angeles authorities yesterday called for the early delivery of two "super scooper" water-dumping aircraft leased from Canada under a contract due to start in October. The craft, which scoop up water by skimming the surface of reservoirs or the sea, have been summoned to fight a four-day uncontrolled blaze 40 miles north of the city.

The fire storm, which is threatening oil and gas pipelines, is one of several hundred in the west which have forced thousands of tourists off popular routes through national parks and mainly remote areas. It has also severely disrupted traffic on the Golden State Freeway, one of California's main road arteries.

Southern California's riskiest fire season normally starts in the autumn with the onset of the Santa Ana winds, which bring hot, dry air from the desert interior.

Although no deaths have yet been reported, and property damage has been limited mainly to holiday homes and outbuildings, the conflagrations have roused memories of recent tragedies such as the death of 14 firefighters in Colorado in 1994, and the loss of 25 lives and more than 3,000 homes near Oakland, California, in 1991.

A battalion of California-based marines has been put on stand-by to help the 20,000 firefighters, volunteers, military personnel and prisoners already striving to contain an estimated 50 serious blazes covering more than 300,000 acres.

On Monday the number of fires classified as "major" by the Idaho-based National Fire Centre was just 20. The total has risen sharply with the arrival of a series of "dry" thunderstorms – producing lightning but no rain.

Dozens of small fires, ambient air temperatures of more than 100° F, and the dangers from rattlesnakes, bears, mountain lions and swarms of so-called "meat bees" fleeing the flames have added to the strain on firefighters.

The forest products industry, claiming 47m acres of national lands present a severe fire risk, chose this week to step up its campaign to be allowed greater access to cut and process "thinnings" in federal forests.

While the American Forest and Paper Association complained that lawsuits by environmental groups had prevented its members from cutting agreed quotas – and contributed to the risk – a federal programme for controlled burns to clean up national woods has run into political opposition in California.

'Newt of the north' to make his sales pitch

By Bernard Simon in Toronto

Little more than a year ago, business people in Canada's industrial heartland derisively wrote off their province as the People's Republic of Ontario. Rising taxes, sweeping pro-union laws and stricter environmental rules earned Mr Floyd Laughren, finance minister in the then-social democratic government, the nickname Pink Floyd.

The allusions have moved to the other extreme however, since the election of a Progressive Conservative government in mid-1995. The new premier, Mr Mike Harris, has been labelled "Newt of the North" after the combative speaker of the US House of Representatives. But the Ontario Tories' targets for cutting taxes and eliminating the budget deficit are more ambitious.

"We have a good product to sell," Mr Harris said in an interview this week on the eve of a trip to the UK, Germany and France to persuade companies, bond investors and travel agents that Ontario is open for business. The Tories have repealed the pro-union labour law, given notice of plans to ease environmental regulations, and begun a sweeping reform of the health care system.

Financial markets have already responded enthusiastically. The premium on Ontario 10-year bonds has shrunk in the past four years from 0.90 to 0.18 percentage points above comparable Government of Canada securities. The spread is now even narrower than it was before bond-rating agencies stripped away the province's Triple-A credit rating in 1991.

Ontario, which contributes about 40 per cent of Canada's economic output, was the biggest non-sovereign borrower on international capital markets in the early 1990s.

But the Tories have promised to eliminate the budget deficit, running at C$11.2bn (US$8.05bn) a year when they took office, by 2001.

Harris: sales tour

Reaching that target will be more difficult as a result of generous tax cuts, the first of which kicked in last month. Under the Tories' plan, Ontario's basic income tax rate will slide from 58 per cent of the federal rate to 40.5 per cent in 1999.

"Supply side always works," Mr Harris says confidently. The secret, he says, is to ensure tax cuts are accompanied by an assault on government spending.

Ontario's Tories have few sacred cows. They chopped welfare payments by 22 per cent shortly after taking office, ended subsidies to business, and imposed user fees on prescription drugs for senior citizens.

Such actions have encountered some strong resistance. About 55,000 civil servants staged a five-week strike earlier this year. Doctors, who are paid by the provincial health care scheme, have complained about inadequate incomes and declining investment. A battle is looming with the teachers' union.

The Tories are also examining government assets and services with a view to privatisation. "The programme or the service might be sacred, but who delivers it is not sacred," Mr Harris says.

However, the government is taking a cautious line on two of its jewels: Ontario Hydro, North America's biggest power utility, and the Liquor Control Board of Ontario, the world's biggest liquor retailer.

AMERICAN NEWS DIGEST

Venezuelan bank sale suspended

The Venezuelan government has been forced to suspend the sale of Banco de Venezuela, one of the country's largest banks, after confusion over the bidding process scared off interested investors.

Three of the four interested buyers are said to have been concerned about the legal basis of the tender, leaving Banco Santander as the sole remaining bidder.

The sale of the bank, which was scheduled for today, was "postponed indefinitely", said Mrs Esther de Margulis, head of the State Deposit Guarantee Fund (Fogade), the majority shareholder in the bank.

Late last week the ruling Democratic Action party charged former Banco de Venezuela officials with trafficking inside information to interested buyers and thus pushing down the bank's sale price. A judge had temporarily suspended the sale only to reverse her decision shortly thereafter.

The stock exchange fell markedly in response to news of the suspension. The index of the Caracas Stock Exchange at mid-morning on Thursday had fallen 50 points to 4,688, after rallying to a high on Wednesday of 4,738.

The incident has sparked a heated debate between political parties and thrown doubt over the future of the privatisation programme, which is supposed to raise in excess of $5bn by the end of next year.

The government's privatisation plan suffered another setback this week when it failed in its attempts to get Japanese investors with a 20 per cent stake in the aluminum smelter Venalum to rescind their veto right on privatisation.

Mr Elias Ynaty, president of Venalum's parent company Corporación de Guayana (CVG), accused the Japanese firm Showa Denko, one of the shareholders, of wanting to "maintain a privileged position in Venalum" and thereby blocking the government's aluminium sector privatisation programme. *Ray Colitt, Caracas*

Libyan award for Farrakhan

Mr Louis Farrakhan, the leader of the US Nation of Islam, has arrived in Libya to receive a human rights prize worth $250,000, the official Libyan news agency Jana said yesterday. On Wednesday the US Treasury Department denied Mr Farrakhan's application to receive the award or $1bn Libyan leader Col Muammer Gadaffi had pledged to the Nation of Islam after meeting Mr Farrakhan in Libya last January.

The Treasury said that Libya had been on Washington's list of states that sponsor international "terrorism" since December 1979, and that it had refused to turn over two Libyan suspects in the 1988 bombing of Pan Am flight 103 over Lockerbie, Scotland. On Tuesday Mr Farrakhan said he would fight any US government effort to deny him the Libyan funds, which he said would be used to build schools and business in American black communities. *Reuter, Tunis*

Drugs baron revokes claims

A Peruvian drugs baron has unexpectedly withdrawn allegations he made last week against President Alberto Fujimori's chief adviser and intelligence service strongman, Mr Vladimiro Montesinos.

Mr Demetrio Chavez Peñaherrera, better known as "Vaticano", had testified in some detail before three judges that he paid Mr Montesinos around $50,000 a month throughout 1991 in exchange for freedom to run drugs out of his illegal airstrip in the Huallaga valley, Peru's cocaine-trafficking heartland.

In his various court appearances, Mr Vaticano has seemed lucid and confused by turns. *Sally Bowen, Lima*

Jardine Fleming has discovered to its cost the perils of 'aggressive' trading tactics

Rogue trader leaves bank with $20m headache

By Nicholas Denton

Flemings, which competes with Barings both in the Asian securities markets and in the City of London, now has a rogue trader of its own.

However, the diverting of $20m from client accounts by Mr Colin Armstrong, the former Flemings executive, pales beside the £830m of losses on derivatives trading in Singapore which brought down Barings in February 1995.

And no evidence exists of organised deception in the Flemings case. The bank stressed there was no secret trading book, such as the account in which Mr Nick Leeson, the trader at the centre of the Barings collapse, hid his losses.

But there are similarities. At Flemings, as at Barings, an individual dealing in derivatives in the Far East bypassed inadequate controls, the investigations have found. At both banks, there were repeated warnings on which management failed to act in time.

Mr Armstrong, the executive at the heart of the Flemings scandal, joined Jardine Fleming, the group's joint venture in the Far East, in 1982. He rose to become chief investment officer of Jardine Fleming Investment Management, its fund management subsidiary.

In September 1993, Mr Armstrong began to trade in Nikkei options, derivatives which carry the right to buy the Japanese stock basket at a pre-set price, on behalf of some of the funds he managed.

This was not unusual in itself, because fund managers often trade in options to gain exposure to markets or to improve their performance in flat markets. But the Nikkei options were highly volatile.

Mr Armstrong, after trading in options, typically waited until the evening or the following day before booking the transaction to a particular account. By that time, in extreme market conditions, the price of the option might triple or fall to a third of its purchase price.

Mr Armstrong managed several conventional funds designed for retail investors in the Far East, including JF Pacific Securities Trust and Fleming Pacific Fund. But he was most closely associated with JFIM's Ninja Trust, a speculative "hedge fund" which gave Mr Armstrong full rein for his aggressive trading tactics.

Like many fund managers and traders in the Far East, he also traded on his own personal account. Traders and fund managers can often earn as much from "PA trading" as they do from salary and bonus.

Instead of allocating the trades fairly, Mr Armstrong typically put options which had turned out profitable into his own account and that of Ninja. For example, Mr Armstrong kept one batch of options rose 317 per cent between purchase and booking.

When the market had moved against him between execution and booking of the trade, Mr Armstrong tended to offload the lossmaking options to Pacific Securities Trust and Fleming Pacific Fund, and a third institution which investigators have not identified.

In December 1993 Jardine Fleming's compliance department first warned that the lack of any written procedure made it "difficult to demonstrate" fair allocation of trades. In spite of a further compliance report, it was only in September 1994 that Flemings appointed a more qualified compliance officer to work with Jardine Fleming in Hong Kong. In May 1995, he raised questions about the unusual profits Mr Armstrong was making on options trading in his personal account and alerted Mr Robert Thomas, chief executive of JFIM, and other board members.

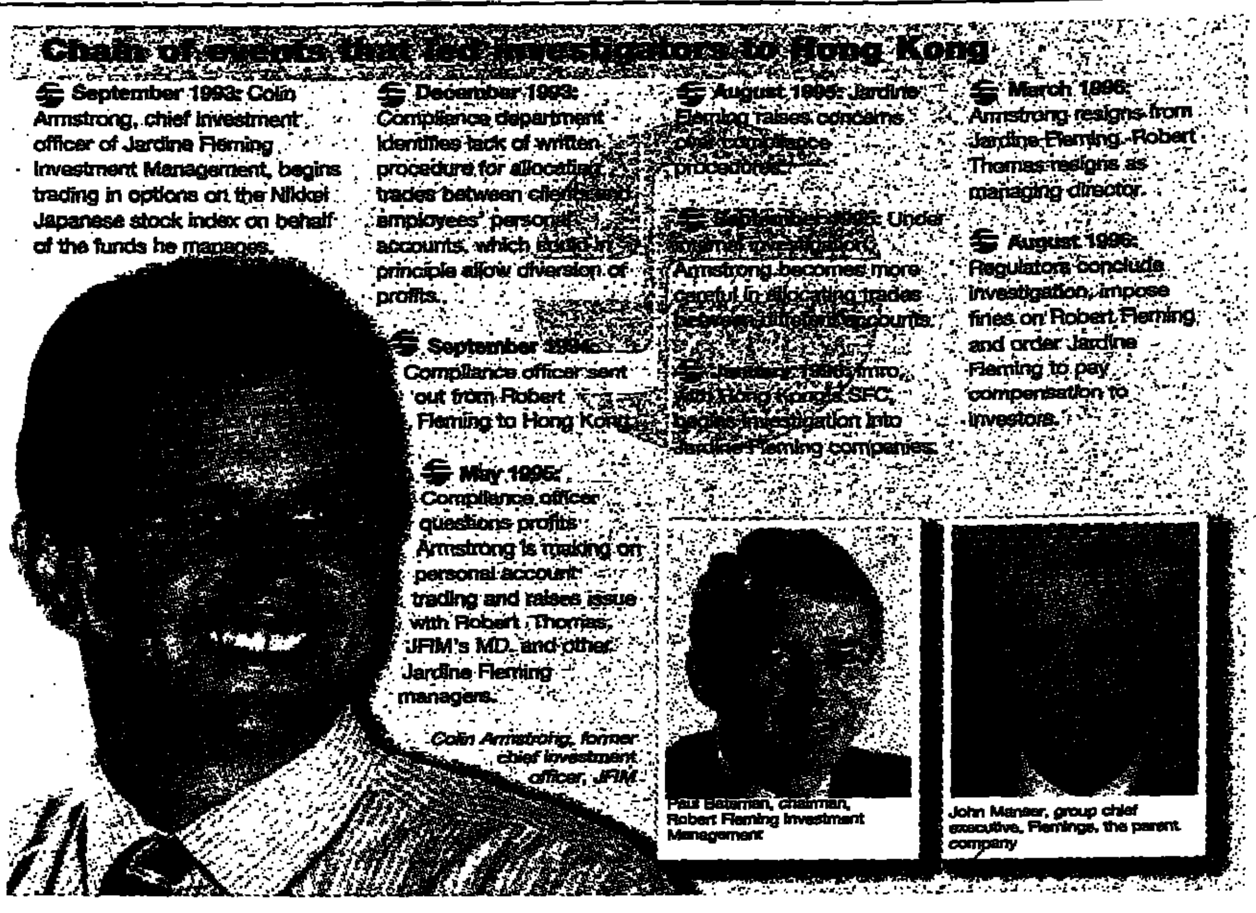
But no immediate action was taken to stop Mr Armstrong trading on his own account. The pattern of trading continued until September 1995, by which time Mr Armstrong had diverted $19.3m from the three disadvantaged clients to Ninja and his personal account. Mr Armstrong's personal profit was at least $3m and Ninja the remainder.

A joint investigation by Hong Kong's Securities and Futures Commission, and UK fund management regulator Imro, began in January this year after the authorities were informed of irregularities by Flemings. Imro became involved because funds managed by Flemings, the parent company, had delegated some of their Far East investments to JFIM and had an obligation to ensure that its associate was properly managing the assets.

But it was only in March, nearly a year after doubts over his trading first surfaced, that Flemings finally asked Mr Armstrong to resign from the company. Mr Thomas gave up his post of JFIM chief executive a month later, taking responsibility for the control failures.

Mr Armstrong has refunded the profits he made as a result of skewed allocation of trades, but no criminal proceedings are expected. Although there is a clear statistical correlation between the profitability of trades and the likelihood they went to Mr Armstrong's personal account, there is no positive evidence that he deliberately discriminated against certain clients. Mr Armstrong was said to have expressed surprise when he saw an analysis showing he had cherry-picked the options. Acquaintances of Mr Armstrong, who moved back to the UK earlier this year, say he is considering starting up his own investment business. Mr Thomas, although the first person ever to be deregistered by Imro, remains on Jardine Fleming's main board with responsibility for business development.

So the main loser is Flemings. It must pay out $700,000 in fines and $19.3m in compensation to the three funds.

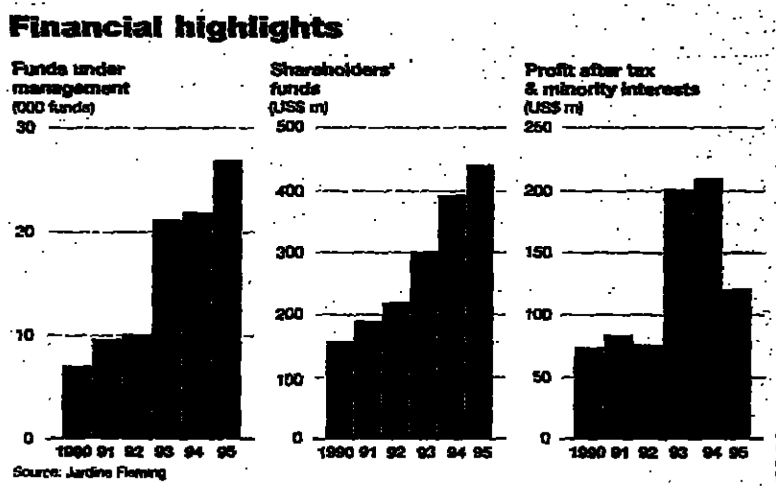


Colin Armstrong, former chief investment officer, JFIM

Paul Bateman, chairman, Robert Fleming Investment Management

John Manser, group chief executive, Flemings, the parent company

Financial highlights



Source: Jardine Fleming

Asian fund managers' ratings

	Number of funds in study	Average stars awarded: Excluding Japan funds	Including Japan funds
HSBC	7	4.00	3.40
Fidelity	9	3.85	4.00
Invesco	6	3.60	n a
GAM	8	3.20	3.50
Schroders	10	3.11	2.80
Indosuez	7	3.00	2.60
BZW	11	2.00	n a
Jardine Fleming	18	1.92	1.42
Thornton	12	1.90	1.58
LGT	12	1.85	1.91
MBf	7	0.28	n a

Analysis of Asian fund managers' performance by Micropal data analysis, published this month by Benchmark Hong Kong. Stars awarded as measure of funds' relative performance against return on US Treasury Bill over three years (1-4/96) adjusted for fund volatility.

Embarrassing blow for big name

By John Ridding in Hong Kong

Jardine Fleming, Hong Kong's first merchant bank, is perhaps the most famous name in the territory's financial centre.

But the penalties handed out yesterday have dealt it an embarrassing blow, leaving questions about the impact on the firm and the response of its two shareholders, Robert Fleming of the UK and Jardine Matheson, one of Hong Kong's founding business groups.

"It has been a painful experience," said Mr Henry Strutt, managing director. "Obviously we are very disappointed," added Mr Alan Smith, chairman. But the two executives stressed that the incident, brought to regulators' attention by Jardine Fleming, was now behind them and affected only part of the group.

For many, the problems unveiled by the probe point to Jardine Fleming's delay in adapting to reforms in international financial markets. One rival fund manager said: "Others were much quicker to establish a distinction between broking and fund management."

The message yesterday from Jardine Fleming's headquarters is that change is already under way – and has been since before the group itself raised concerns about compliance issues with Imro in August 1995. Specific measures include:

- Management changes. The past six months has seen the arrival of several new senior executives, many from Robert Fleming. The shake-up appears to reflect a shift to the sober culture of the UK merchant bank.
- A strengthening and reorganisation of the compliance team. The number of compliance staff has been increased from six to 10. Mr David Robinson, former head of Robert Fleming's internal auditing operations in London, has moved to Hong Kong.
- Reforms to dealing. Jardine Fleming is setting up centralised dealing desks in Hong Kong and Tokyo. Rather than allowing fund managers discretion over which brokers they use – a system which raises the possibility of abuse – centralised dealing will conduct trades on the best available terms. It also enables a clearer audit trail.
- The commissioning of an independent review to monitor progress in compliance procedures by Linklaters & Paines. According to the Securities and Futures Commission, the review did not reveal serious deficiencies.

These changes add up to significant upheaval. But clients will take convincing that problems have been resolved. Rivals will also seek to capitalise. With Hong Kong set to launch a compulsory pension fund scheme there is much to play for. The compensation for the group's clients will hit first half profits, and although Jardine Fleming says the results for the first six months will be similar to the same period in 1995, that was a difficult year with net profits falling from US$211m (£135.3m) to US$122m.

Funds managed by the group have struggled to match the performance of the early 1990s; funds under management have remained static at about US$22bn.

The investigation and the reforms appear to underline the cultural difference between the two main shareholders and raised the prospect of increased tensions. This was dismissed by Jardine Fleming. "Relations have never been stronger," said Mr Smith.

Test of strength for regulators' global accords

The action taken yesterday against Jardine Fleming by regulators in the UK and Hong Kong, is the first public demonstration of the strength of the new co-operation agreement signed in March between the UK's Investment Management Regulatory Organisation and the Hong Kong Securities and Futures Commission.

The agreement, which was made within the framework of the memorandum of understanding reached between the UK Treasury and the Securities and Investments Board and the SFC in October 1992, is part of a trend towards international co-operation in financial market regulation.

The need for greater sharing of information between regulators was underlined by the collapse of Barings, the UK investment bank, in February 1995, when the shortcomings in the relationship between UK and Singapore regulators was exposed.

In spite of the growth of global securities markets and cross-border investment management activity, before the Barings crisis international co-operation and supervision agreements were rare.

Since then regulators have focused more on global activity. Imro now has two international co-operation and supervision agreements, the first with the US Securities and Exchange Commission signed in May 1995 and the second with the SFC. Imro does not rule out further such agreements in future, but says: "When we analysed what firms were doing, and where, outside the UK, by far the most active areas on the fund management side were the US and Hong Kong."

The agreements provide for the authorities to exchange information on investment fund managers and companies and assist in carrying out on-site inspections in each other's jurisdictions.

The authorities also pledge to keep each other informed of changes in relevant laws and regulations; provide each other with information on firms and fund managers registered in both jurisdictions; and use reasonable efforts to ensure the other is provided with any information discovered which points to a breach, or an anticipated breach, of the other's rules and regulations.

Co-operation does not extend to such things as sanctions for breaches of the rules. Imro, for example, has the ability to impose fines as it did on Jardine Fleming Asset Management and three Fleming subsidiaries yesterday, whereas the Hong Kong authority does not.

Robert Rice

'Hong Kong does not need this sort of publicity'

By John Ridding and Louise Lucas

The penalties levied yesterday against Jardine Fleming, Hong Kong's biggest fund manager and pillar of the financial establishment, will have repercussions beyond the merchant bank's harbour-front headquarters.

For investors, the broader issue is whether the problems cited by the market regulators represent an isolated incident or are part of more general shortcomings in the territory's markets.

With rivals from Singapore to Shanghai seeking to usurp Hong Kong's position as the region's financial centre, and with investors edgy about next year's handover to China, the territory can ill afford market doubts. As one fund manager said: "This is bad publicity that Hong Kong does not need right now."

Mr Gerard McMahon, head of enforcement at the Securities and Futures Commission, the territory's markets watchdog, sought to allay concerns. "The strong message is that we expect the industry to uphold the highest possible standards of practices and we will not tolerate abuses," he said.

Many in the industry were surprised by the scale of the penalties and some expressed concern about the impact of the case. "This is damaging for confidence in the mutual fund industry," said one prominent fund manager. But, along with several counterparts, he played down the charge of widespread malpractice.

Most viewed Jardine's problems as a hangover from more free-wheeling times. Hong Kong's markets, they argued, had made substantial strides in standards, transparency and regulation since the dark days of the late 1980s, when the head of the stock exchange was jailed for corruption and the futures market collapsed under the burden of HK$1.8bn in bad debts.

Mr Mark Konyn, senior director of Fidelity Investments in Hong Kong, said: "Standards and enforcement here are as good as many developed countries and well ahead of the rest of the region."

There is much to support this view. The SFC has implemented significant reforms since it was established in 1989 to impose order on the territory's markets and to salvage a reputation shattered by market failures and scandals. The 250-or-so recommendations in the 1988 Hay Davison report on market reforms have largely been implemented and enforced.

The SFC has installed codes of practice for the unit trust industry and clamped down on abuses such as "rat-trading", in which brokers use client trades to benefit personal accounts.

Mr McMahon described malpractices such as front-running – in which brokers place personal orders using knowledge of clients' orders – as "a worldwide problem". He denied they occured in the local market with unusual frequency. He also pointed to the expansion of the fund management sector and daily trading volumes in the stock market, frequently in excess of HK$5bn ($642.78m) as evidence of investor confidence.

The industry itself has taken steps to improve practices. "Compliance has become a major function of operation," said Mrs Romi Williamson, local compliance officer at HSBC Asset Management. The expansion of big US fund management companies had also helped. "Big firms like Morgan Stanley need to comply with the SEC [the US's Securities and Exchange Commission] rules so for them to do funny things is practically impossible," said Mr Marc Faber, a local fund manager.

But for some, the Jardine case has left a bitter taste and lingering questions. "The fact that this had been going on at the biggest player in fund management is hardly reassuring," said one institutional investor.

While many welcomed the co-operation between the UK's Investment Management Regulatory Organisation and the SFC – and viewed the action by the Hong Kong regulator as tough – some fund managers felt further action was needed to ensure compliance standards in line with those in the UK or the US.

In a recent interview, Mr McMahon said the SFC was committed to improvement. As a first step, it is set to send a notice on internal controls to financial intermediaries to step up its campaign against malpractices such as front-running. It is an evolutionary step. But, as recent events make clear, these are steps that Hong Kong must take.

UK NEWS DIGEST

BZW argues case for Emu

The City of London risks losing its leadership of European financial futures markets if the UK chooses to remain outside European Monetary Union, according to one of the most active banks in these markets.

Mr Graham Newall, chief executive of BZW Futures, said yesterday: "If Britain stays out of the single currency, Paris and Frankfurt will dominate" trading in futures contracts denominated in the Euro, the new European single currency.

BZW Futures, the futures arm of Barclays Bank, is one of the biggest participants at the London International Financial Futures and Options Exchange (Liffe), as well as other international derivatives exchanges.

However, few other London derivatives houses appear to share BZW's views. Mr Matthew Fosh, chief executive of SGF Chase, a joint venture supported by Chase, the US bank, said: "London will remain at the heart of what is happening." He said that London's skill base and infrastructure would continue to attract business.

Mr Daniel Hodson, chief executive of Liffe, said that "both the exchange and most of our members believe that we are in an extremely strong position in relation to short-term interest rate and bond contracts regardless of whether Britain joins Emu or not."

- Mr Howard Davies, deputy governor of the Bank of England – the UK central bank – yesterday insisted that discrimination against European Union states which failed to join a single currency would be illegal.

Speaking at an Austrian economic and banking conference, he argued that countries who failed to join Emu would still have every right to remain within the single market. And he warned that threats of discrimination were either counter to single market legsislation – or else attempts to "impose political pressure through threats and bluster".

In recent months France and Germany have insisted that if the UK stays outside Emu it should not have equal access to the future EU payments system, Target. In particular, they want to impose restrictions on the level of liquidity issued through the system.

However, the Bank of England has been trying to fight these demands by arguing that any discrimination would be illegal under single market legislation. EU central bankers are likely to discuss the issue next week at a meeting of the European Monetary Institute, the future European Central Bank. *Financial Times Reporters*

■ BEEF CRISIS

Government forced to review cull

The British government said yesterday it would review its policy on the selective slaughter of cattle to wipe out BSE amid calls by MPs and farmers to abandon the cull.

The decision to review plans for the cull follows findings published yesterday indicating that the BSE epidemic will be close to extinct by 2001 without a cull, together with recent evidence that cows can pass the disease to their calves.

But the European Commission said it was unlikely to change its views on the selective slaughter of some 147,000 British animals most at risk of contracting BSE which is a precondition for lifting the ban on British beef exports.

Yesterday there were signs that MPs in the governing Conservative party could force the government to abandon the cull, arguing that it would not even guarantee a lifting of the export ban. *Financial Times Reporters*

■ ENVIRONMENTAL AUDITING

National income data challenged

Britain's national income is possibly being overstated by more than £2bn ($3.1bn) a year by not taking into account the depletion of oil and gas reserves, according to "green" economic indicators published yesterday.

So-called satellite accounts, developed by the Office for National Statistics, are the UK's first step towards gauging the economic cost of pollution and natural resource use.

They show for the first time that net national income in 1993, the year studied by the pilot project, was overstated by £2.2bn. This was equal to almost a quarter of the oil and gas industry's contribution to gross domestic product.

The UK project follows guidelines elaborated by the United Nations to promote the harmonious international development of satellite accounts. *Leyla Boulton*

Editorial Comment, Page 9

■ LLOYD'S

Rescue plan wins support quota

The ruling council of Lloyd's of London last night confirmed it had sufficient support for its £3.2bn rescue plan to go ahead. The decision all but secures the 308-year-old insurance market's financial future.

A formal announcement is expected today when Mr David Rowland, the chairman, is expected to confirm that support for the plan by Names has exceeded 90 per cent. Names are the individuals whose assets have traditionally supported the insurance market.

However, rebel US Names are still trying to delay the plan. They were due yesterday to seek a re-hearing of an appeal court judgment which this week overturned an injunction requiring Lloyd's to comply with US securities laws.

Meanwhile, senior Lloyd's figures last night began discussions with the UK Department of Trade and Industry about the level of funds available to fund Equitas. This is a giant reinsurance company Lloyd's plans to take responsibility for billions of pounds of mainly US asbestos and pollution liabilities. Names who have not accepted the plan so far are expected to be given another two weeks. *Ralph Atkins*

CONSTRUCTION

Feeling the strain

	1989 Units	%	1992 Units	%	1995 Units	%
Truck mounted	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
All terrain	800	8	1,000	11	1,440	18
Rough terrain	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Industrial	2,300	22	1,500	16	1,040	13
Crawler	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	10,500	100	9,500	100	8,000	100

Source: Off-Highway Research

Mobile crane numbers fall

The number of mechanical cranes in the UK has fallen by nearly a quarter since the late 1980s due to a slowdown in the construction industry and a continued move away from heavy manufacturing, according to a report from Off-Highway Research, a London consultancy specialising in construction equipment. In 1995 there were 8,000 mobile cranes in operation, down from 10,500 in 1989. The biggest change has been the slump in the proportion of industrial cranes in the total, from 22 per cent seven years ago to 13 per cent last year.

Construction companies and industry today much prefer hiring their cranes rather than buying them outright. Some 95 per cent of the 209 new cranes bought last year were purchased by leasing companies for hiring out to end users. In 1988 the comparable figure was 78 per cent of the 571 cranes purchased in that year. *Peter Marsh*

Salzburg Festival/**David Murray**

Schoenberg saves the day

Salzburg means Mozart, of course; it cannot let him go. In the 60 or so years of the festival so far, for example, *Le nozze di Figaro* has never been long enough out of the repertoire to be missed. On the strength of this year's revival, it should consider trying that: a 10-year moratorium, perhaps.

Nobody's heart seems to be in it. How else to explain a production – Luc Bondy's, from last year – which boasts a good orchestra and singers and a conductor with good Mozartean credentials, but would have looked disheartening in Bremen or Braunschweig, even at one-tenth of Salzburg's prices? An opera-loving couple could have paid £540 for a pair of best seats, and hundreds of couples presumably did; one's heart goes out to them.

The sprightly, forward playing of the Chamber Orchestra of Europe under Edo de Waart only emphasised the glum ineptness of Bondy's staging. He has no comic knack; even the hiding-round-the-armchair scene in Act 2 was muffed, and the garden act was an unqualified fiasco. Individually, many of the singers deserved kinder words, especially Solveig Kringelborn's Countess and Dorothea Röschmann's Susanna.

Not, however, Dmitri Hvorostovsky, sadly miscast as the Count. The honeyed baritone we love was recognisable in only a few phrases, for he kept striving gruffly after a haughty menace which is just not in his range. Contrarywise Ildebrando D'Arcangelo, who will be an excellent Count some day soon, had to lend his unsuitably aristocratic tones to Figaro. I was not surprised to hear that the fetching Cherubino, Susan Graham, had received a note from last year's conductor asking her to be "less funny" *Figaro* has rarely seemed so flat.

Salzburg must be a bit jaded with Strauss's *Elektra*, too. Hildegard Behrens repeated her steely, tireless, ultra-efficient heroine for a new production by Keita Asari – Japanese touches are currently in vogue. He seemed to be unfamiliar with the story.

At the end, instead of Hofmannsthal's unforgettable image – Elektra triumphant but dead, her sister pounding at a locked palace door crying vainly for Orestes (already pursued by the Furies) – we had a stagey dissolution of the palace so that Elektra's corpse could be displayed on a high platform. Orestes had stridden off and away five minutes earlier, sword in hand, as if to new adventures. The programme-synopsis deliberately concealed this faithless rewriting: shame on it.

Exulting at at the prospect of imminent matricide: John Bröcheler as Orestes with Hildegard Behrens' 'Elektra'

Karen Huffstodt sang poor little Chrysothemis broadly and loudly; her scenes with Elektra were mere contests in volume. John Bröcheler added a plaintive bleat to Orestes' every note. No withers were wrung, even in the Recognition scene. At least we had a fine, dignified Clytemnestra from Leonie Rysanek, making her final operatic appearance to great acclaim at an advanced age; and Lorin Maazel drew a forceful and notably lucid account of the score from the Vienna Philharmonic.

But then there was Schoenberg's *Moses und Aron*, an unclassifiable masterpiece, in a magnificent co-production with the Netherlands Opera. Conducted by Pierre Boulez and staged by Peter Stein, it was as powerful here as at Amsterdam last autumn. A previous Salzburg staging – with more contemporary echoes: the Holocaust, of course – was admirable, but this more abstract, less history-conscious version carries absolute conviction.

David Pittman-Jennings and Chris Merritt have grown more deeply into their roles as the eponymous hero and anti-hero, and the Concertgebouw Orchestra and Netherlands Opera Chorus outdid themselves. Schoenberg will certainly have won new respect among the Salzburg audiences. This was a real festival production on the highest level, and it prompted gratitude and awe in equal parts.

Dance

Princely Hell

Much touted as an erotic show – "the sexiest work ever performed" boasts the advertisement, adding (in smaller type) "in Chicago" – the Joffrey Ballet's *Billboards*, now at the Royal Festival Hall, is like nothing so much as a two hour deodorant commercial. It is set to the frightful bayings of Prince, a pop singer – affrontingly loud and no less boring – and makes use of four choreographers. There results a sequence of lacklustre incidents, blatantly staged and as sexually charged as blotting paper, in which the dancers reveal little except split jumps and a coarse style.

The Joffrey Ballet of Chicago has a long and worthy history. (It was seen in London two decades ago as a serious ensemble.) Its repertory boasts works by major figures in this century's ballet. That it should have to descend to playing the odious tosh of *Billboards* is a sad indictment of artistic policies and, I infer, of the financial stringencies which doom the company in bondage to such vulgar nonsense.

That the piece asks from its cast nothing but the crassest steps is a further indication of how low dance can sink: the men behave like muggers on remand; the women are manhandled and race hither and yon at the behest of choreographic banalities. It is a *totentanz* masquerading as entertainment, its performers lacking even the slickness and zip of good show-biz dancing.

Billboards is, inevitably, proclaimed as bringing "ballet" to an audience who know about Prince but nothing about dancing. Such missionary work is supposed to be beneficial both to ballet and to a new public. Flat-earthers may accept this reasoning. Anyone caring about dance or rock music will view it as insolently patronising, opportunistic, a determined quest for the lowest common denominator in dance and popular culture.

That *Billboards* has little or nothing to do with ballet is an incidental curiosity. Its choreographers – Laura Dean, Charles Moulton, Margo Sappington, Peter Pucci – have produced fatuous incidents that are worried and dragged about, after the fashion of a terrier with an old shoe, by dancers who display a certain amount of energy but little other merit. Moulton takes them to the disco in Hell; Laura Dean and Margo Sappington set them pointlessly on the go, like hyper-active delinquents. (Beatriz Rodriguez, in a gold lamé tracksuit, is the Duchess of Windsor on a hot tin roof.)

The staging is full of predictable tricks, including light shone in the audience's eyes and pelvises rotating like hula-hoops, and the sound track is a threat to the ears. Best described as a Truly Awful evening, *Billboards* – which is devised by Gerald Arpino, the company's artistic director – has the stench of decay about it.

Clement Crisp

Theatre/**Alastair Macaulay**

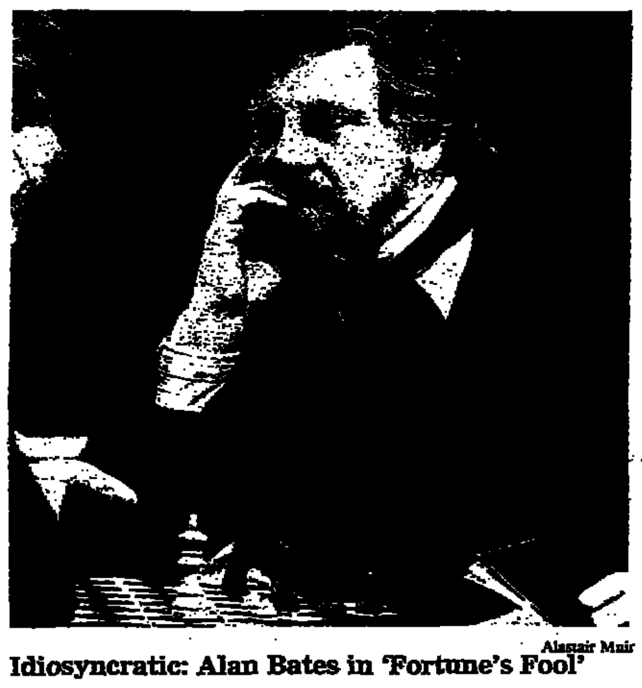
Rare Turgenev rediscovered

Ivan Turgenev's scarcely-known play *Fortune's Fool*, now resurrected in a fine new adaptation by Mike Poulton at Chichester's Minerva Theatre, is a marvellous discovery. Almost nothing in its Chichester staging is good, and yet the play itself is so surprising, so enthralling a mixture of satire and pathos, that it becomes more or less a major event in the theatre of 1996, a beautiful demonstration of Turgenev's complex skill. Although it reminds you of other Russian plays from *The Government Inspector* to *The Cherry Orchard* (seldom, however, of Turgenev's own classic, *A Month in the Country*), it is in essence unique.

The background is that of nine Russian plays out of 10: a household in the provinces into whose stagnant existence the advent of strangers and/or former inhabitants causes a commotion. Here the new arrivals are Olga Petrovna, the newly adult mistress of the house returning after seven years, and her polished young husband from St Petersburg, Pavel Yeletsky.

They are at once visited by their neighbour Tropatchov, an overbearing fop – highly reminiscent to us of several fops in English Restoration comedy, but brilliantly developed by Turgenev – who is at once hilarious and sinister (cruel, too) in the way he takes charge of every scene. The main victim of his snobbish malice is Kuzovkin, an impoverished middle-aged gent who has long lived in this household and who Olga Petrovna has been glad to meet again.

Kuzovkin, the "fortune's fool" of the title, is plied with drink by Tropatchov and encouraged to make himself ridiculous in Yeletsky's eyes. But, goaded and mocked beyond endurance and too drunk to stop himself, he retaliates by suddenly claiming – to general amazement – that he is Olga Petrovna's real father. (Though nobody sees, she has just entered the room; and, hearing his words, she promptly leaves it.)



Alastair Muir

Idiosyncratic: Alan Bates in 'Fortune's Fool'

In the play's second act, Olga and Yeletsky take various routes to deal with the implications and/or embarrassments of this extraordinary situation. Yeletsky is simply concerned to have things as *comme il faut* as possible; but Olga is anxious not only to discover the truth (her long scene with Kuzovkin is the most moving part of the play) but to know how it will affect her marriage. Then, when he finally leaves the household he has inhabited so long but has disturbed so shockingly, she is left with her husband, not to mention the by now insufferable Tropatchov, in a climate that is perilously fraught.

Gale Edwards, directing, exaggerates the play's two extremes. On the one hand, the rude-mechanical elements of provincial *poshlost* that the play initially satirises become vulgarly laboured; on the other, the most intense scenes for Kuzovkin *et al* are rendered bizarre by expressionistic lighting (from beneath, casting mighty shadows on the walls behind). Never does Edwards simply give us a naturalistic milieu in which we can believe.

There is a tension in Alan Bates – in all roles – between civilised veneer and nervous force that is exceptionally interesting. Much of his, often very idiosyncratic, phrasing is masterful; he brands certain key lines onto memory. But neither here nor in any other of the stage roles I have seen him play in recent years does he quite convince. He has no stillness. Both in gesture and voice, he does too much with every line. In this respect, alas, he is the opposite of his son Benedick, who plays Yeletsky with none of the Petersburg polish the role needs: an alarmingly limited actor in physicality and, especially, voice.

Rachel Pickup's Olga Petrovna is sensitively and intelligently judged, but artificially delivered. By contrast, Desmond Barrit is strikingly natural even in the play's most artificial role, Tropatchov – although he makes the too-common misjudgement of playing the casual bad manners of a highly sophisticated man as if they were the stupid manners of an ill-bred man. (Pronouncing some French words in a bad accent – but only some – is a cheap way to hunt for laughs.) Almost all Jason Carr's music – perfectly all right in itself – is superfluous, and one passage, early in Act One, of *literally* orchestrated chaos epitomises the contrived character of the whole production. Wretched. Still, you can lift your eyes above the stage and re-imagine the more spontaneous and astonishing play that Turgenev actually wrote. Wonderful.

Minerva Theatre, Chichester, to September 14.

Cultural oasis in Florida

Michael Carlson finds the Norton Museum in Palm Beach flourishing

For years, visitors to West Palm Beach shared a secret. The Norton Museum's jewel of a collection was hidden in a sleepy neo-Deco gallery, across the Intercoastal Waterway from the opulence of Palm Beach. "We were well-known to scholars and collectors", says British curator David Setford who jumped at the chance to join the Norton after moving to the US. "It is so exciting to help transform a small Southern museum into a major national treasure".

The Norton is in the midst of a rebuilding programme which will triple its size, allowing for fuller display of its permanent collection and for accommodating the crowds of 2,500 a day it already draws for its special exhibitions. Crowd pullers like Monet and Picasso have been augmented by a superb Man Ray show and, last year, the most comprehensive exhibition of the under-appreciated Precisionists (Sheeler, Demuth, O'Keefe) yet seen.

Ralph Norton assembled his private collection between 1920 and 1950 and this forms the core of the museum's exhibits. Norton bought wisely and the museum boasts an impressive group of Cubist paintings. He also invested in contemporary American artists, including first-class examples of Hopper, Demuth and Avery. After building the gallery in 1941, Norton began culling his collection, consciously trying to build in other strands: including European master prints, ancient Chinese and pre-Columbian art.

He was helped by the gallery's location. Although Palm Beach itself is to the nouveau riche what the eight-sided plate is to nouvelle cuisine, Setford points out that the community is highly knowledgeable in the art world, and from the start locals have enriched the collection with gifts by artists such as Millet.

From the outside the new Norton may resemble a Miami shopping mall, but inside it houses the American collection superbly, and forms an exceptional setting for its third special show, Andrew Wyeth's "Helga" paintings.

Wyeth, a popular artist in America, is best known for his figures in the foreground sharing space with inanimate objects in the background, often on a tilted horizon. These portraits of his neighbour, Helga, were done over a period of 15 years, and reflect that style. Helga is enigmatic, though hardly a Mona Lisa. Barely animate, she reveals little to the viewer. Leaning against a tree, her braids become indistinguishable from the branches. Even in "Black Velvet", an homage to Manet's "Olympia", she looks away, keeping herself private.

The Norton is heavily involved in revitalising the West Palm Beach community. "The world watches Palm Beach with a certain sense of humour" says Setford. "But downtown West Palm is getting off its feet; it's bustling and diverse. We're very much aware of being on this side of the waterway, and we're looking to be part of the plan to reclaim the city of West Palm."

Thus it was typical that alongside the Wyeth exhibition was a show of photographs by Anthony Edgeworth taken in the Brandywine, Pennsylvania area where Wyeth lives. Although they failed in their attempt to work in a *faux*-Anglicised 18th-century style, they did provide a context for Wyeth's own work.

The museum's grand reopening will take place in January 1997 with an exhibition of Rodins from the Canter collection. Also featured next year will be a major retrospective of George Bellows' winter paintings, one of the best of which, "Winter Afternoon, Riverside Park", is already in the Norton's collection. This exhibition may help confirm Bellows' position as a major American artist of the early 20th century.

In the meantime, the Norton's next exhibition is the paintings of Christopher Brown. Brown is influenced by Bay Area painters such as Richard Diebenkorn, but applies that influence to contemporary events, turning anonymous bystanders into pieces of history. "Instant", featuring the crowd awaiting JFK's limo pass by in Dallas, is typical in investing a street scene with artistic import.

Which in a way, is what the Norton has done for years. In the future, the casual visitor may miss the surprise of encountering such an oasis on Florida's tourist track. But the Norton's place on the cultural map will more than make up for that sense of loss.

INTERNATIONAL ARTS GUIDE

■ AMSTERDAM

CONCERT
Concertgebouw
Tel: 31-20-5730573
● Radio Symfonie Orkest: with conductor Lawrence Renes and alto Bernarda Fink perform works by R. Strauss, Mahler and Korngold; 11am; Sep 1

EXHIBITION
Rijksmuseum
Tel: 31-20-6732121
● American Watercolours 1860-1940: this is the first European exhibition to focus on American watercolours. Towards the end of the 19th century American artists began to establish a tradition of their own. Chief among these were Winslow Homer, John Singer Sargent and Edward Hopper. The exhibits are from the Museum of Fine Arts in Boston; to Oct 27

■ BERLIN

CONCERT
Konzerthaus Tel: 49-30-203090
● Michail Sekler, Ilja Sekler and Andrei Gridtchouk: the violinists and viola-player perform works by Taneyev, Kodály and Dvorák; 11am; Sep 1
Philharmonie & Kammermusiksaal
Tel: 49-30-2614383
● New York Philharmonic Orchestra: with conductor Kurt Masur perform works by Bruckner and R. Schumann; 8pm; Sep 3

OPERA
Deutsche Oper Berlin
Tel: 49-30-3438401
● Carmen: by Bizet. Conducted by Rafael Frühbeck de Burgos and performed by the Deutsche Oper Berlin. Soloists include Agnes Baltsa, Heidi Person, Nadja Michael and Yvonne Wiedstruck; 6.30pm; Sep 1

■ CAPE TOWN

DANCE
Arena Tel: 27-21-215470
● Junction: a choreography by Alfred Hinkel, performed by The New Maverick Jazzart Dance Troupe; Mon 6.30pm, Tue, Thu – Sat 8.15pm, Wed 1.30pm, Sat also 3pm; to Sep 14 (Not Sun)

■ ESSEN

EXHIBITION
Museum Folkwang
Tel: 49-201-8845314
● Positionen – Reisen an die Grenzen der Malerei: exhibition featuring works by young artists exploring the boundaries of painting. The display includes works by Douglas Allsop, Lawrence Carroll, Peter Hopkins, Michael Jäger, Gerwald Rockenschaub, Günther Selichar, Beat Zoderer and Leo Zogmayer; from Sep 1 to Oct 6

■ FLORENCE

EXHIBITION
Casa Buonarotti
Tel: 39-55-241752
● Rodin e Michelangelo: this exhibition focuses on the ways in which the French sculptor Auguste Rodin (1840-1917) was inspired by the work of Michelangelo; to Sep 30

■ FORT WORTH

EXHIBITION
Kimbell Art Museum
Tel: 1-817-332-8451
● The Path to Enlightenment: Masterpieces of Asian Sculpture from the Musée Guimet in Paris, the French national museum of Asian art. The exhibition traces the development of Buddhist art from its origins in north central India through all of Asia; to Sep 1

■ HAMBURG

CONCERT
Hamburgische Staatsoper
Tel: 49-40-351721
● Thomas Moser: accompanied by pianist Helmut Deutsch. The tenor performs songs by Beethoven and Schubert; 8pm; Sep 2

■ HELSINKI

CONCERT
Finlandia-talo – Finlandia Hall
Tel: 358-0-40241
● José van Dam: accompanied by pianist Maciej Pikulski. The baritone performs songs by Brahms, Wolf, Duparc, Ibert and Poulenc. Part of the Helsinki Festival; 8pm; Aug 31

■ LONDON

CONCERT
Purcell Room
Tel: 44-171-9604242
● Graham Scott: the pianist performs works by Mozart, Schubert, Rachmaninov and Scriabin; 7.30pm; Sep 2

EXHIBITION
Victoria & Albert Museum
Tel: 44-171-9388500
● The Pre-Raphaelites and Early British Photography: this exhibition brings together drawings and watercolours by the Pre-Raphaelites and their followers, and work of such photographers as Francis Bedford, Lady Hawarden and Julia Margaret Cameron; to Sep 29

■ LUCERNE

CONCERT
Kunsthaus Luzern
Tel: 41-41-2103562
● Berliner Philharmonisches Orchester: with conductor Claudio Abbado and pianist Radu Lupu perform works by Brahms. Part of the Internationale Musikfestwochen Luzern; 7.30pm; Aug 31

■ NEW YORK

EXHIBITION
The Metropolitan Museum of Art Tel: 1-212-879-5500
● Winslow Homer: retrospective exhibition featuring approximately 180 paintings, watercolours and drawings by the 19th century American painter. The display, giving an overview of Homer's work in more than 20 years, is organised chronologically in thematic groupings that include depictions of the Civil War, genre scenes celebrating rural America in the 1870s, heroic images of seaside life, seascapes of Prout's Neck, Maine, where the artist settled in 1883, and the tragic painting from his final years; to Sep 22

■ PARIS

EXHIBITION
Centre Georges Pompidou
Tel: 33-1-44 78 12 33
● James Coleman: this exhibition shows installations of this Irish artist, and is a part of the cycle "L'Imaginaire irlandais" that takes place in Paris from May until September; to Nov 18

■ PHILADELPHIA

EXHIBITION
Philadelphia Museum of Art
Tel: 1-215-763-8100
● Cézanne: an international loan exhibition spanning the career of Paul Cézanne (1839-1906), organised by the Philadelphia Museum of Art in collaboration with the Réunion des Musées Nationaux/Musée d'Orsay in Paris and the Tate Gallery in London. The display includes some 100 oil paintings, 35 watercolours and 35 drawings from public and private collections; to Sep 1

■ SALZBURG

CONCERT
Grosses Festspielhaus
Tel: 43-662-80450
● New York Philharmonic Orchestra: with conductor Kurt Masur and violinist Anne-Sophie Mutter perform Brahms' Violin Concerto in D, Op.77 and Bruckner's Symphony No.4. Part of the Salzburger Festspiele; 11am; Aug 31

■ THE HAGUE

EXHIBITION
Het Paleis Tel: 31-70-3381120
● Leon Spillaert (1881-1946): exhibition of some 100 works by the Belgian artist. His work includes gouaches, watercolours, drawings and illustrations for poetry; to Sep 1

■ VERONA

OPERA
Arena di Verona
Tel: 39-45-590109/966/726
● Carmen: by Bizet. Conducted by Daniel Oren and performed by the Coro e Orchestra dell'Arena di Verona. Soloists include Giovanna Casolla, Kallen Esperian, Nunzio Todisco and Giorgio Zancanaro; 9pm; Sep 1

WORLD SERVICE
BBC for Europe can be received in western Europe on medium wave 648 kHZ (463m)

EUROPEAN CABLE AND SATELLITE BUSINESS TV
(Central European Time)

MONDAY TO FRIDAY

NBC/Super Channel:

07.00
FT Business Morning

10.00
European Money Wheel
Nonstop live coverage until 15.00 of European business and the financial markets

17.30
Financial Times Business Tonight

CNBC:

08.30
Squawk Box

10.00
European Money Wheel

18.00
Financial Times Business Tonight

The maddening crowds

Tourism, the lifeblood of Florence, is also its ruin, laments **Robert Graham**

ON THE BEATEN TRACK

Overheard on the streets of Florence: "This is real high-density beauty!" says an awed young American tourist. "Yeah, it packs it all in," replies another.

Not everyone might describe Florence this way. But no other European city contains so many jewels of architecture, art and sculpture in such an accessible space. The glories of Renaissance culture, for which Florence is renowned worldwide, are all within walking distance of each other.

So long as cultural tourism remained a privileged preserve, the concentration of everything visitable in a small area was part of Florence's charm. Now it is the city's undoing. The ancient narrow streets of Florence are overrun by a straggling army of tourists.

"Florence has a normal population of 400,000 but now we are getting between 50,000 and 60,000 tourists a day," says Mr Mario Primicerio, the city's mayor.

In the sweltering summer heat all ages seem reduced to a uniform of shorts, T-shirts and trainers, wearing backpacks and trailing bottles of water like life-support systems. The Ponte Vecchio, the 14th century bridge across the Arno, has become so crowded that the jewellers whose shops line it fear customers can no longer window-shop.

Long queues stretch outside the Uffizi gallery and people wait up to two hours to see the pride of Florentine Renaissance painting. Inside the Duomo, the cathedral's solemn grandeur is disturbed by groups of chatting tourists lingering in the cool interior to escape the heat.

Tourism is the city's lifeblood with over 7m visitors a year. The 370 registered hotels receive 4.2m tourists a year. Others stay in rooms, including those at the 22 US university campuses in and around Florence. More are simply day-trippers coming by train or bus.

Since mid-July the city council has initiated a parking system to accommodate buses away from the centre, handling 300 buses a day. Such is the pace of today's tourism that some coaches leave Rome in the morning, spend seven hours in Florence and move onto Venice for the night.

Saturation point: the city has a plan to tackle congestion

"The city is a treasure you cannot hide," says Mr Primicerio, whose high-vaulted office is decorated with magnificent Vasari frescoes. "But equally we cannot allow Florence to be overwhelmed by tourism – no matter what the immediate economic benefits."

The church authorities have found themselves in a similar dilemma over admittance to the Duomo. Every so often there is talk of imposing an admission charge. But this is always overruled by those who want to keep the cathedral open as a place of worship.

The biggest single attraction in Florence is the Uffizi, the world's oldest art gallery which receives more than 1m visitors a year. "Most of these visitors come to see only three or four paintings – above all Botticelli's Birth of Venus and Leonardo's Annunciation," observes Ms Caterina Caneva, the deputy director. "And when they visit the Accademia, they go only to see Michelangelo's sculpture of David.

"All the tour operators sell the Uffizi as part of their Florence package," she adds. "You can't exclude people just because they come to see a few paintings. This is a centre of culture, not the exclusive preserve of scholars."

Since a Mafia bomb damaged part of the Uffizi in May 1993, security experts have ruled that the shortage of exits from the 16th century building imposes a limit on numbers. The gallery now admits 550 people at a time with up to 5,000 entering a day.

Such restrictions create queues which, as Mr Primicerio points out, are bad for everyone. "Queues give the tourist a negative impression; but if a person is waiting for two hours, they are also bad for our traders, and limit the time for visiting lesser-known places."

The Uffizi hopes to relieve the queues by providing more exits, enlarging the exhibition space, spreading visitors more evenly across the opening hours of 8.30am to 6pm and encouraging tourists to book in advance. Until last year advance booking was impossible since the entry ticket to state-run galleries was classified by the finance ministry as a tax – and a tax could not be booked in advance. Now that it has been reclassified, the Uffizi hopes to experiment with a limited system of advance booking next month.

Last year the city drew up an outline plan to tackle the growing saturation. The mayor believes there is still room to relieve congestion by restricting school groups to the "quiet months" from November to February.

And he wants to do more to encourage tour operators to vary their programmes and show tourists more of the city's 35 galleries and 73 churches – such as the Horne Museum, five minutes' walk of the Uffizi. This beautiful two-storey palace has a remarkable collection of early Renaissance paintings, sculpture and artefacts amassed by a 19th century British aesthete, yet has only 20 visitors a day.

Another solution would be to make it easier and cheaper for tourists to visit a wider range of galleries. Owned by a Byzantine variety of state organisations, municipalities and religious institutions, there are no tickets that cover visits to several galleries. A couple visiting four museums in a day would spend between them at least L100,000 (£42).

"We want to issue a 'Florence card' which would be for a day or say a week to allow entry to all the galleries," says Mr Primicerio. "Because the laws need to be changed we can only start with a ticket covering municipal museums."

At present visitor levels, the measures under consideration can only postpone saturation, but will not solve the problem, which has been exacerbated by a sharp upsurge in Japanese visitors, now the fourth largest group at 400,000 a year after the Americans, Germans and British. In the future, tourists from eastern Europe, the Asian tiger economies and China are likely to join the throng.

In 2000, Florence's jubilee year, the city expects numbers to rise to 15m. The pressure on its galleries and churches looks likely to intensify.

This is the seventh in a series on places changed by mass tourism

LETTERS TO THE EDITOR

Number One Southwark Bridge, London SE1 9HL

We are keen to encourage letters from readers around the world. Letters may be faxed to +44 171-873 5938 (please set fax to 'fine'), e-mail: letters.editor@ft.com Published letters are also available on the FT web site, http://www.FT.com Translation may be available for letters written in the main international languages.

EU's Social Chapter is counter-productive

From Ms Ruth Lea.

Sir, In "Unions learn to love Europe", (August 27) Robert Taylor states that "the EU's priority is to make labour markets more flexible to combat mass unemployment". Alas, the Social Chapter and other social and employment legislation from Brussels have just the opposite effect.

We accept that, so far, only two measures have passed through the Social Chapter. They are not, however, innocuous.

Compulsory European Works Councils and the provisions of the parental leave directive impose regulatory burdens on business, reduce companies' room for manoeuvre and, above all else, reduce the flexibility of labour markets.

Given the wide remit of the Social Chapter there are clearly more measures to come.

We agree with the European Union that flexible labour markets should be regarded as a priority in order to combat mass unemployment. And we believe that the persistently high level of unemployment is the problem that economic policymakers ought to be doing everything they can to solve. But the EU's Social Chapter is clearly counter-productive – the "opt out" should be maintained.

Ruth Lea,
head of the policy unit,
Institute of Directors,
116 Pall Mall,
London SW1Y 5ED, UK

Implications of VW subsidies row

From Mr David Marsh.

Sir, In your editorial "Subsidies in Germany", (August 26) you rightly say that subsidies for Volkswagen by the east German state of Saxony conflict with Germany's commitment to European integration. The point deserves to be spelt out in some detail, for it has considerable indirect implications for the project to create economic and monetary union by 1999.

Saxony's measures to aid VW could fatally undermine Germany's efforts to build a "stability pact" for fiscal policy within Emu. To rectify the Maastricht treaty's shortcomings over post-Emu budget deficits Mr Theo Waigel, the German finance minister, has been trying to create an additional mechanism to ensure fiscal discipline among Emu members. These efforts will lose credibility if Bonn now rides roughshod over the supranational mechanisms in the European Union to ensure proper use of state aid. Brussels' right to vet national aid programmes is a central element of the EU's competition policy. The articles upholding this in the Treaty of Rome represent a much older commitment than the 1991 Emu plan.

There is a potentially dangerous irony here. An early move to monetary union among states that are not economically ready to fix exchange rates irrevocably against the D-Mark could lead to more demands for job-creating subsidies. Mr Karel van Miert has pointed out that the VW-Saxony episode has already led to matching demands for leeway in state aid cases.

Precisely because of the fear of this sort of fiscal "free for all", Mr Waigel favours a "stability pact". Yet the German government lays itself open to the charge of encouraging practices that, elsewhere, it wishes to proscribe. The Saxony government's measures may be popular with Germans who accuse Brussels of interference.

However, Germany's willingness to come to terms with such "interference" represents an important test of its readiness to make the still more important sacrifice of national sovereignty demanded by Emu.

Unless a solution in accordance with the EU's competition principles is found soon in the VW dispute, the Germans' commitment to consigning the fate of their currency to a supranational European central bank could start to ring hollow.

David Marsh,
director of European strategy,
Robert Fleming Securities,
25 Copthall Avenue, London EC2R 7DR, UK

Sweet talk on audits

From Mr Stuart Dunstan.

Sir, How refreshing to read an article on accountancy ("Time to put an end to the paper chase", August 22) which is so blindingly obvious to anyone involved in preparing or auditing accounts of owner-managed companies.

Small companies need accountants, not auditors, and the authors of the piece, Stella Fearnley and Richard Brandt, must be commended for exposing the futility and wastage of applying rules and regulations designed for multi-million plc's to the sweet shop on the corner. If only the powers that be would listen to such common sense.

Stuart Dunstan,
Stuart Dunstan & Co,
chartered accountants,
105 Oak Hill,
Woodford Green,
Essex 1G8 9PF, UK

Debt forgiveness unlikely to help Africa's forgotten poor

From Mr Karl A. Ziegler.

Sir, Oxfam's Kevin Watkins' comments on debt relief (Letters, August 16) concludes that benefits from debt forgiveness should be realised by the world's poor.

Although Oxfam's fundraisers do not emphasise it, many African leaders are probably already studying the latest Mercedes and Lear jet catalogues in anticipation of unmerited debt relief.

Of the 20 unsustainably indebted nations identified in the World Bank's proposed debt relief framework, only Uganda and Bolivia meet the bank's realistic criteria of pursuing genuine reform efforts to justify debt relief.

Uganda's President Yoweri Museveni has said his government's "sovereignty" should rest with his people seeing clean hands in government. His government's emphasis on financial probity, greatly expanded auditing and accelerated privatising programmes has helped to attract unprecedented inflows of private investment into Uganda. Were his example followed by others, the world's poor would be early beneficiaries.

Karl A. Ziegler, director,
Centre for Accountability and Debt Relief,
6 Bradbrook House,
Kinnerton Street,
London SW1X 8EL, UK

Europa • **Dominique Moïsi**

A mission for America

Europeans fear US foreign policy is succumbing to an assertive brand of nationalism

Seen from Europe, the US presidential campaign evokes little passion. Perhaps this is because there seems to be little doubt left as to the outcome, or because European analysts see little difference between the two candidates and their increasingly similar brands of moderate social conservatism and liberal economics.

Or perhaps it is that Europeans expect little change in foreign policy even if there is a change in the White House – apart from the more open nationalism a Republican president might bring.

More than five years after the end of the cold war, America's intellectual and political leaders still appear to find it difficult to define their foreign policy options and priorities. The answer for some is a rediscovery of the national interest, according to a recent pamphlet from the Commission on America's National Interest, a bipartisan group of top foreign policy advisers. The committee argues that the interest of Americans in world affairs will be maintained only if US leaders can demonstrate clearly that it is in the country's national interest.

Gone is the old conviction that America has a mission to make the world better which helped define US foreign policy. Even before the end of the cold war, the neo-conservatives backing Ronald Reagan were wondering whether the world was worth saving.

Today, they argue, conditions have changed and the world does not need to be saved. With the removal of the Soviet threat, Europe, in particular, does not need substantial US protection any longer.

Polls certainly confirm that Americans are more obsessed than ever by domestic, social and economic concerns – even if they are interested in international issues. But they cannot fail to see that events elsewhere affect them directly, if only through terrorism. Never has America been so powerful in the world, yet never have Americans felt so vulnerable.

A few years ago it was fashionable to contrast the economic power of Japan with the relatively modest standard of living of the Japanese. There is a similar contrast today between the power of the US and its citizens' sense of vulnerability as they are confronted with internal and external terrorism.

Americans may find it difficult to risk the life of their soldiers in remote places they cannot even locate on the map. But they understand even less the brutal eruption of the external world on their territory through terrorism.

It is this combination of supremacy and vulnerability in the absence of a clear and well-defined threat that is leading to the emergence of an assertive brand of US nationalism which Europeans find difficult to accept. This manifests itself particularly in trade, where there is a growing contradiction between the rhetoric that what is good for America – that is, American business – is good for the world, and the narrower, strictly national definition of US interests.

In the case of China, for example, the US preaches respect for human rights. But American companies chase business no less aggressivelythan their European and Asian partners and rivals.

It is difficult for a country to claim to be the enlightened leader of the world when it chooses to pursue the narrow agenda of the national interest to keep public opinion interested in international affairs. Such contradictory behaviour runs the risk of recreating the simplistic and archaic form of anti-Americanism which had nearly disappeared in the Europe of the late 1980s.

With US leaders united by a lack of vision, one is tempted to evoke the past with a certain nostalgia. In the 1940s, 1950s and even the 1960s, there was a generation of leaders such as General George C. Marshall, Dean Acheson and many others in less exalted positions who knew Europe intimately. Their generous and enlightened internationalism proved the best answer to the immense challenges of postwar reconstruction.

Of course the conditions at the time were different. America dominated the world economically and was secure enough in its superiority to be generous.

The threat was also clear. But politicians on both sides of the Atlantic were still trying to educate their people about the importance of the transatlantic alliance – they had not yet abandoned pedagogy for demagogy. They were not saying what they expected their electorate wanted to hear, but what they thought was right, and they were very often successful in their power of persuasion.

What made America unique at the time was a combination of a belief in the uniqueness of the US, moralism and optimism. One may wonder today if Mr Henry Kissinger, secretary of state under Richard Nixon, was not too successful in his attempt to Europeanise American foreign policy by trying to introduce classic Machiavellian balance-of-power logic.

Americans now tend to define their priorities more like Europeans – not in the sophisticated, realistic sense Mr Kissinger implied, but in a narrower, more nationalistic and selfish sense. Such a "Europeanisation" of US foreign policy does not bring the two continents closer: it constitutes the greatest challenge to the survival of the alliance.

There is nothing wrong in itself with enlightened moderate nationalism. In fact there is probably no alternative to it, and it is the natural order of things. But a country which is still imbued with the sense of a universal mission, which is uniquely powerful in global terms, cannot rely on simple recourse to the rhetoric of pure national interest.

The author is deputy director of the Paris-based Institut Français des Relations Internationales and editor of Politique Etrangère. *He writes here in a personal capacity*

FINANCIAL TIMES

Number One Southwark Bridge, London SE1 9HL
Tel: +44 171-873 3000 Telex: 922186 Fax: +44 171-407 5700

Friday August 30 1996

Deadlock in Palestine

Benjamin Netanyahu's election as Israel's prime minister three months ago was bound to bring confrontation with the Palestinians. Although Mr Netanyahu claims to respect the letter of agreements with the Palestinians reached by the previous Labour government, he has always been clearly out of sympathy with their spirit.

He has not yet withdrawn Israeli troops from Hebron, which was supposed to happened in June. He has so far avoided any face-to-face meeting with Yassir Arafat, the Palestinian president. He is increasing Israeli settlements in occupied territory, in size if not in number. He has demolished a Palestinian youth centre in east Jerusalem. And he has squashed the hope, which Labour had allowed the Palestinians to nurse, that "final status" talks might eventually give birth to an independent Palestinian state.

Mr Arafat was in a very delicate position even while Labour was in power. He is even more so now. Few Palestinians now believe the peace process is giving them anything more than two overcrowded Bantustans (one in the West Bank, the other in Gaza) under a puppet ruler who maintains order by methods even more vicious than those Israel could get away with in the days of direct rule.

Yesterday's four-hour general strike was an attempt by Mr Arafat to remind Israelis of the danger to peace if nothing is done to reinforce his credibility. But it is far from certain that such implied threats will have the desired effect.

Israelis voted for Mr Netanyahu because a series of bomb attacks by Palestinian Islamic extremists had convinced them the peace process involved a net loss rather than gain in Israeli security. A new escalation of violence now would not affect Mr Netanyahu's power base, but would probably render Mr Arafat's position untenable. And any prolonged strike, as opposed to a symbolic show of strength, would have far more devastating effects on the Palestinians' own precarious economy than on that of Israel.

That is not to say that Israel has anything to gain from Mr Netanyahu's tough line. He may well be right in thinking the risk of war with any Arab state is now negligible, and that Israel's security forces can maintain control of the West Bank and Gaza with or without Mr Arafat. But cold peace abroad and escalating violence at home is not an encouraging scenario for foreign investors.

Nor should Mr Netanyahu forget that in just over two months he may well face a re-elected US president assured of four more years in power. Such a president will not "turn against Israel", but he may feel free to withhold support from an Israeli government whose policies he believes are contrary to Israel's own long-term security.

Green accounts

Accountants prefer being precisely wrong to being roughly right. Their reluctance to stray beyond the readily measurable is understandable, but not always sustainable. The question is no longer, for example, whether to "green" the national accounts, but how. Yesterday's pilot environmental accounts of the UK illustrate the many difficulties. But they are also a sensible step in a desirable direction.

National accounts have well-known anomalies: sales from finite stocks of natural resources are counted as income, for example, and an industry's output of environmental "bads" – such as air pollution – is ignored when valuing its production of goods. It would be desirable to possess information on such wider implications of economic activity. The question is how to do it.

There are two broad alternatives: full integration within a single set of national accounts or preparation of "satellite accounts" that present complementary information alongside the traditional accounts. Such satellite accounts can link categories that fall within the already measured boundary of marketed production to others that fall outside it.

The approach chosen by the Office for National Statistics (ONS) is the second. There are two compelling reasons: first, the quantitative data needed to fill all the holes are unavailable; and, second, valuation of an unpriced resource is a political, not a technical decision.

Yesterday's figures were just a start, throwing light only on the output of atmospheric emissions, oil depletion and environmental expenditures. Limited they may be. But they are also quite revealing.

They show, for example, that electricity generation produced a quarter of greenhouse gas emission and 44 per cent of acid rain emission. This is not that surprising. More interesting is the indication that the economic cost of exploiting limited natural resources may not be that large: the cost of oil and gas depletion is estimated at £2.2bn in 1993, which is a little under a quarter of the income generated by the industries, but under half a per cent of total gross domestic product. Similarly, the burden of pollution abatement on industry may also be modest. Environmental expenditures by industry as a whole, at £2.3bn in 1994, were only 1.5 per cent of combined value added.

A middle course exists between being precisely wrong and roughly right. It is to be precise where that is feasible and to provide information where it is not. That is what the ONS has chosen. It should proceed as swiftly as possible.

GEC's fat cat

The row over the proposed compensation for Mr George Simpson, the incoming chief executive of the UK's General Electric Company, has reached the point where it needs to be put in context. If GEC has offended its shareholders by structuring Mr Simpson's pay package wrongly, it should make amends. Much more important, if Mr Simpson can secure the future of one of Britain's most crucially important manufacturers, his annual compensation of some £1.5m is neither here nor there.

Given the current of often justified hostility to fat cat wage deals, the GEC case should be seen as exceptional. Too often, incumbent managers – notoriously, those in privatised monopolies – have been paid several times their previous wages for doing the same job. Too often again, chief executives have been awarded share options as a pure bonus, on the apparent grounds that they need an extra inducement to turn up and do the job for which they already receive a salary.

GEC, by contrast, presents the case of a genuine market in chief executives. Lord Weinstock, the company's chief architect and presiding genius for over 30 years, is retiring. Let us assume that the board, in picking Mr Simpson as successor, has found the best available candidate. Mr Simpson seems to have driven a correspondingly hard bargain. The result is a freely negotiated price.

It can be fairly argued that in a corporate world which places increasing emphasis on teamwork, paying superstar salaries to a chosen few may be counterproductive. Against that, there are cases in which superstars – assuming, again, that Mr Simpson is in that class – are indispensable.

In its present condition, GEC bears the marks of Lord Weinstock's unique personality. It has been run on risk-averse principles for many years. The emphasis has been on short-term financial returns and protected markets, such as the UK defence industry.

In its present form, GEC is like a hedgehog: eminently defensible – a third of its net worth is in cash – but correspondingly slow-moving. There is a melancholy contrast with its more venerable and much larger namesake, General Electric of the US, which has a record of dynamic growth compared to GEC's real decline.

It seems clear that some elements of Mr Simpson's contract, such as the slack criteria for awarding share options, have been badly framed. But that is a quibble. If a company at the heart of British technology such as GEC can be renewed, pay up and be done with it.

Unconventional but consummate campaigner: Clinton doing what he likes best and does best on a whistle-stop appearance at Royal Oak, Michigan, this week Reuter

Reborn as a New Democrat

Philip Stephens on Bill Clinton's winning combination of deft campaigning, astute political positioning and simple good luck

It was Theodore Roosevelt, a Republican president, who remarked that "the most successful politician is he who says what the people are thinking most often in the loudest voice". No-one has learned the lesson better than Bill Clinton.

This past week Mr Clinton has been doing what he likes best and does best: campaigning. In the manner of an illustrious Democrat predecessor, Harry Truman, he spoke to small-town America from the open platform of a train. At the Democratic convention in Chicago last night he staked his claim for a second term at the White House. The president is a great campaigner. And this is his last campaign.

Barring a political earthquake he will win in November. Things can go wrong. Witness the troubles faced by Dick Morris, the chief architect of the campaign strategy. But the polls put Mr Clinton 10 points or so ahead of Bob Dole with 10 weeks to go. The economy is on the president's side.

Luck maybe, but behind him are four years of steady growth and low inflation. The country has created 10m new jobs. The budget deficit has more than halved.

But watching Mr Clinton, listening to him, it is impossible to know what he would do with such victory. He may not know himself. He might throw it away. Probably. Most second-term presidents do just that. But he leaves a small, infuriating, doubt. Freed from the burden of a lifetime striving to win, he might, just might, make a difference.

Perhaps I have been conned. Frank Luntz, a Washington pollster who is less than sympathetic to the Democrats, says Mr Clinton is the best communicator since Franklin D. Roosevelt. He is right. As Mr Luntz puts it, the voters may know the president's policies are causing them pain. But somehow he persuades them he shares that pain.

Thus it has been with the Republican-inspired overhaul of welfare which Mr Clinton signed into law last week. It is a bad reform, kicking away the federal safety net for the unemployed without offering them new pathways into work. It is the first real break with Mr Roosevelt's New Deal. Endorsing it was politics. The aim was to re-establish Mr Clinton as a New Democrat. Middle America does not like welfare.

Charles Rangel, a Democratic congressman and critic of the legislation, got it right with the laconic remark that "I always said that the worst place to be is between President Clinton and his re-election". But Mr Clinton intends to have it both ways. Last night he was promising to fix the raft of deficiencies in the welfare bill. You might have thought he had opposed it all along.

We all know, though, about the president's flaws. The fast-turning kaleidoscope of passions and enthusiasms. The rages. The emotional highs and lows. The constant craving for acclaim. Even the weakness for junk food.

He is not much loved, not much trusted by American voters. There is the staged empathy, the sheer nerve with which he detaches himself from the Washington politics he plays so well, the ever-present tear in the corner of the eye at moments of sadness or solemnity.

And yet he is still compelling. He is intelligent. He is engaged and engaging. The homespun homilies should make you cringe. But somehow they work. You can see him working the angles. But surely some of the passion must be real.

The great irony is that it was his opponents who gave Mr Clinton the chance to reinvent himself after the chaos of his first two years at the White House. The hubris among Republicans after their sweep of the House of Representatives and the Senate in the 1994 elections bought the president a breathing space.

The lurch to the right symbolised by Newt Gingrich's Contract with America invited the president to return to the political centre ground. The Democrats were chastened, ready to follow the president almost anywhere. Mr Clinton was born to politics. He does not miss such opportunities.

Mr Dole has been trying to wrench the Republicans back towards the centre. At the party's convention in San Diego two weeks ago, Mr Gingrich was kept out of sight. In Chicago this week, his writings have been remaindered in the bookstores. The Republican candidate left behind in San Diego the more unpalatable elements in his party's platform.

But Mr Clinton, reborn as a New Democrat, has run faster into the centre. His commitment to a balanced budget by 2002 has welded his party to fiscal conservatism. He has borrowed the Republicans' smartest clothes on social policy, challenging their claim to be the guardian of the family. The official Democratic election platform follows the president's lead by declaring an end of the post-war era of big government.

For a European observer, the gathering in Chicago's United Centre has borne little resemblance to a political convention. It was made for the television networks, a gooey confection of Hollywood soap and political theatre. Its stylised choreography, its "citizen story-tellers", the kitchen-table style of Hillary Rodham Clinton have served up glitz, pathos and bathos in equal measure.

Forget about the poor, the dispossessed and the single mothers. They do not vote. Mr Clinton is speaking to the audience with electoral clout: America's middle-class families.

One or two speakers have sounded like real politicians. Jesse Jackson and Mario Cuomo, unabashed Old Democrats, reminded the president that principles count in politics. Both are fierce critics of the welfare reform. The liberals still have powerful constituencies within the party machine. Mr Clinton could not have endorsed the welfare legislation without the accompanying rise in the country's statutory minimum wage.

But the New Democrats hold the levers of power at the centre. Vice-president Al Gore, anointed this week as Mr Clinton's chosen successor, is a leading standard-bearer. So too is Evan Bayh, the Indiana state governor and youthful rising star who was given one of the best prime-time slots at the convention.

Look for new ideas and they come from the Democratic Leadership Committee, the New Democrat caucus once chaired by Mr Clinton. Mr Gore's comment that the choice at the election is between a bridge to the past and a bridge to the future might have been directed as much at Old Democrats as at the 73-year-old Mr Dole.

The biggest risk to Mr Clinton's re-election may lie in Mr Dole's plans for sweeping cuts in income and capital gains taxes. The sums in the Republican package – the cost is $550bn over six years – do not add up.

The Reagan years exploded the myth that cutting tax rates is the way to raise revenues. For more than a decade Mr Dole himself has scorned the supply-siders' fantasy. He seems confused as to what comes first, balancing the budget or implementing the tax cuts. He cannot achieve both – and he knows it.

The danger for Mr Clinton is that the voters may ignore the logic of the arithmetic. Americans like tax cuts. So the president has already offered his own package, focused on tax credits for children, deductions for education and incentives for savings. The cost is only a fraction of Mr Dole's package. But again last night Mr Clinton felt obliged to add a few more sweeteners including a capital gains tax cut for homeowners.

There is a more serious problem. If not big government, what? The president's dilemma is that of every centre-left leader in the industrialised world. The parallels with Tony Blair, the leader of Britain's Labour party, are everywhere. Mr Clinton's answer is value-based politics. The mantra is opportunity, responsibility. Government can help people to help themselves.

The emblems of this strategy are a raft of incremental changes designed to persuade the voters that even small government can make a difference. Thus the "families first" tax agenda, the swathe of initiatives to improve educational attainment, the tough stance on crime, the pledges on the environment, the assault on teenage smoking and tougher gun controls.

On the looming crises in the funding of federal pensions and in Medicare and Medicaid, the president is studiously silent. He will have to face the issues if he wins, but that is then.

Mr Clinton has probably done enough to be the first Democrat since Mr Roosevelt to return to the White House for a second term. His prospectus will not – as he claims – recreate the American dream. That is impossible. The effortless economic growth of the post-war decades which guaranteed the country's children a higher standard of living than their parents has gone forever. But the voters do not want to hear that. So Mr Clinton will not tell them.

·OBSERVER·

Sub-Urban comedy

■ Are you famous? Do you hanker for immortality, by having your likeness constructed in wax? Then here's a cautionary tale.

Jerzy Urban, the communist government's mouthpiece in Poland during the miserable 1980s, when he regularly appeared on television to defend the *military* dictatorship, is now owner-editor of Nie, a popular and highly profitable satirical weekly magazine.

Urban has bought the waxwork image of Lech Walesa, the former Solidarity leader and ex-President. A waxworks museum in Copenhagen decided that Walesa was no longer sufficiently important to be on display so Urban picked it up for a mere $3,000 – peanuts for the now wealthy scribbler.

"We couldn't permit Walesa to be turned into candles" mischievously explained Urban, as he paraded the dummy version of Lech through Warsaw's streets in an open Cadillac this week.

Schoolboy stuff

■ There was some tough talk from Chancellor Helmut Kohl the other night, banging on about guarding against "lazy compromises" in setting up the single currency – but it was birthday boy Hans Tietmeyer who stole the show, by delving back four decades to prove his European credentials.

At a reception for Germany's business and banking elite to celebrate the Bundesbank president's 65th birthday, Tietmeyer pulled out a faded leaflet, marking the occasion of his passing his school leaving exams in 1952.

His geography teacher had penned a good luck message to "a champion of the European Coal and Steel Community [forerunner of the European Union] and of a new Europe". The teacher happened to have set this subject as an essay topic. But it proved, Tietmeyer said, that "I was a European when others were Atlanticists". So that's full marks for foresight – but maybe rather less for speed of delivery.

Plain speaking

■ Has the UK subtly down-graded the status of its Rome embassy? We only ask because Britain's new ambassador to the Quirinale remains a plain "Mister" – rather a break from tradition.

Tom Richardson – who took over in July from Sir Patrick Fairweather – is the first mister to take up the ambassadorship, following a succession of lords and knights. Even Sir Patrick – another plain mister until just before his arrival in Rome – acquired a knighthood before presenting his credentials.

Richardson is an old Italian hand, having served in the Milan consulate-general in the 1960s and as head of chancery in Rome in the mid-1980s. He will therefore be acutely aware of Italians' love of titles, most of whom boast of being at least *dottore* or *professore*. A plain *signore* will stick out like a sore thumb.

Ramming it home

■ Indian police would like a word with Sukh Ram, who was telecommunications minister until May. But there's one problem: Ram has recently been residing at Southend-on-Sea, a British coastal town.

Part of his job as minister involved awarding contracts to private-sector companies during India's telecoms privatisation programme last year.

People are keen to ask Ram how he came by the equivalent of $1m in cash, found recently at his two homes in Delhi. Twenty investigating officials took more than 24 hours to count the bundles stored in polythene bags, suitcases and bedsheets.

Ram – whose Hindi name means "contentment" – has a simple explanation for his absence. He's in Southend-on-Sea for medical treatment, staying with his doctor son-in-law. Everyone – not least the cops – wishes him a speedy recovery.

Bucking trends

■ President Clinton's pre-election onslaught on the tobacco industry hasn't prevented its biggest companies from turning up at the Democratic convention in Chicago.

Philip Morris, RJ Reynolds and Brown & Williamson have all been wining and dining delegates, the recipients of this hospitality generally turning out to be delegates from tobacco-growing states such as Kentucky, Virginia and North Carolina.

But Philip Morris has also made a substantial contribution in kind, though not by handing out free cigarettes at the strictly no-smoking United Centre in Chicago; instead its Kraft Foods subsidiary has produced 30,000 packets of Macaroni instant dinner, in case delegates get peckish. Each piece of macaroni is fashioned as a donkey, the traditional Democrat emblem.

Not that this kind of braying will get them into the Democrats' good books.

The Financial Times

50 years ago

French Black Market
The black market in gold coins and British and American banknotes has witnessed a marked decline in rates in the last few months. The gold louis, for example, can now be bought for a little over Frs. 4,000, whereas it was valued at over Frs. 5,500 in June and over Frs. 6,500 in May. There are several reasons to explain the depreciation of gold on the black market. First is the influx of foreign visitors bent on holiday-making or attending the peace conference, which is absorbing the activities of over 2,000 persons, enjoying, moreover, diplomatic privileges.

U.S. Industrial Activity
The trend towards greater production and distribution in the U.S. continued in July and the first half of August in the face of sharp advances in commodity prices, according to a summary of business and financial conditions according to a summary compiled by the Federal Reserve System. Industrial production increased during July to 174 per cent of the of the 1935-39 average compared with 171 per cent in June. Business activity was considerably above the base period, except the manufacture of newsprint and certain tobacco products.

FINANCIAL TIMES
Friday August 30 1996

Clinton set to cut tax burden on homeowners

By Jurek Martin and Patti Waldmeir in Chicago

President Bill Clinton was expected last night to steal some more Republican thunder with a proposal substantially to ease the capital gains tax burden on middle class and retired homeowners.

But the first controversy in an otherwise smooth Democrat convention week erupted yesterday with the resignation of Mr Dick Morris, the president's controversial and influential political adviser.

A supermarket tabloid devoted to scandal, reported that Mr Morris, seen as the main architect of the president's move to the centre over the past two years, had shared confidential information about his relationship with the Clintons with a prostitute.

This threatened to draw media attention away from the president's nomination acceptance speech, in which he was to unveil the capital gains tax cut and other initiatives on small businesses and education. He was expected to state his vision for a second four years in the White House, if re-elected in November.

Vice-president Al Gore has told the convention that the Democratic ticket represented the party of "hope" and the Republicans that of the past.

White House aides confirmed that Mr Clinton's address, at prime evening television time across the country, would include a targeted capital gains tax reduction, designed as a sharp contrast to the across-the-board and much larger cut in taxes proposed by Mr Bob Dole, Republican candidate.

Convention reports........Page 5
Reborn as New Democrat ..Page 9

His $548bn multi-year lower tax package, Democratic strategists claimed, would lead to a much larger federal budget deficit.

The Clinton proposal, estimated to cost $1.4bn in revenues over several years, would grant a $500,000 exemption from capital gains to all homeowners on the sale of a primary residence.

Current law allows a homeseller to escape capital gains only if a new residence of equal or greater value is purchased within two years. There is an additional $125,000 exemption available to those 55 or over.

White House officials said it would not penalise those who sell houses and move into smaller residences – either because they have retired or their circumstances have changed for the worse or as a result of a job relocation to a less expensive area.

It would also benefit long-time homeowners whose residences appreciated greatly in value in the boom housing market of the 1980s.

Flemings fined and agrees to pay $19m in refunds

By Nicholas Denton in London and John Ridding in Hong Kong

Flemings, the investment banking group, faced deep embarrassment yesterday as regulators in London and Hong Kong imposed fines of £700,000 ($1,085,000), announced $19.3m in compensation payments to investors and revealed that one of the group's top fund managers had diverted profitable trades to his own personal account.

The fines, levied by Imro on four fund management companies in the Flemings group, were the third highest ever imposed by the UK fund management industry regulator.

Imro, which has become one of the most forceful UK regulators under Mr Phillip Thorpe, terminated the registration of the London arm of Jardine Fleming Investment Management, the associate company in Hong Kong in which the misconduct took place. Mr Robert Thomas, the former chief executive of JFIM, became the first individual to be taken off Imro's register.

Mr Thorpe, Imro's chief executive, said the disciplinary action was a warning that international fund management companies based in the UK "must ensure those London standards are applied throughout the operation".

In Hong Kong, the Securities and Futures Commission announced that Jardine Fleming, the Far East joint venture between Flemings and Jardine Matheson, had agreed to refund $19.3m to three funds which lost as a result of the irregularities.

Part of the compensation will come from personal profits of more than $3m made by Mr Colin Armstrong, the 43-year-old the former chief investment officer of JFIM and the man at the centre of the scandal. Investigators found that Mr Armstrong, over a period of two years, systematically placed profitable option trades in his own account and that of Ninja Trust, a JFIM hedge fund with which he was associated.

Less profitable and loss-making trades were left with the three funds which will get compensation – JF Pacific Securities Trust, Fleming Pacific Fund and an international institution which investigators have not identified.

Funds managed by Flemings, the parent company, and subcontracted to JFIM for investment in the Far East were not disadvantaged by Mr Armstrong's activities. But, as well as fining the JFIM arm £400,000, Imro fined three UK-based Flemings fund management companies £100,000 each for failing to check procedures at their Hong Kong associate.

Franc hits five-month low as gloom grips France

By David Owen in Paris

The franc and the Paris stock market took a tumble yesterday while the government came under attack from both ends of the political spectrum, deepening the despondency that has gripped France recently. The franc slid to a five-month low against the D-Mark before recovering, amid rumours of Bank of France intervention, to end the day in London only marginally down.

Paris stocks were harder hit, with the benchmark CAC-40 index tumbling below the psychologically important 2,000 level to close at 1,977.56, a loss of 1.27 per cent.

There was also bad news on the public spending front when Mr Jean-Marie Spaeth, chairman of the Caisse Nationale d'Assurance Maladie, the national healthcare agency, predicted in a newspaper interview that the 1996 social security deficit would be between FFr50bn and FFr55bn ($9.8bn-$10.8bn).

There seems scant relief in store for prime minister Alain Juppé's increasingly jittery government – unemployment figures could set a new record and next week's second-quarter gross domestic product figures are expected to reveal little if any growth.

The government is setting much store by an upturn in economic growth in the second half of this year and beyond to enable it to cut its general financial deficit to 3 per cent of GDP in 1997 in line with the Maastricht convergence criteria for monetary union.

Both Mr Juppé and President Jacques Chirac felt obliged to reiterate yesterday that the franc would participate in Emu from the scheduled start date in 1999.

Mr Chirac is to travel to Bonn on Sunday for the latest of his regular meetings with Germany's chancellor Helmut Kohl. The Elysée last night described the get-together as a "regular consultation". It was "not at all" a crisis meeting.

With thousands of farmers blockading roads across France, Mr Marc Blondel, secretary-general of the Force Ouvrière trade union, sought to keep up the pressure on ministers, saying the current situation in France was "fairly comparable to 1995".

The gloom was further underlined by a survey for the weekly magazine Le Point, which found that 77 per cent of voters thought the economy was deteriorating, with 62 per cent believing it would continue to do so.

Nearly seven out of 10 thought unemployment would worsen, with the same proportion expecting a wave of strikes similar to the one that all but paralysed the country in November and December 1995.

Russian gem sales agency disbanded

Continued from Page 1

diamond industry in Russia."

He also insisted that the shutdown would not affect the protracted negotiations for a new contract between Russia and the international producers' cartel organised by De Beers of South Africa.

Komdragmet's responsibilities would be transferred to the finance ministry and the newly formed ministry of industry, Mr Kotlyar said, but it was not yet clear how the new system would work. Officials at the finance ministry and Mr Viktor Grytsalev, former deputy head of Komdragmet who is to supervise the dismantling of the agency, refused to comment.

Mr Kotlyar said only Mr Boris Yeltsin, the Russian president whose August 14 decree dissolved Komdragmet, could explain why the decision had been taken. He said one motive may have been to enhance the authority of the finance ministry, now headed by the president's former top economic adviser, Mr Alexander Livshits.

The former Komdragmet boss said the move might eventually cut red tape by bringing the management of gemstones and precious metals under the aegis of the finance ministry.

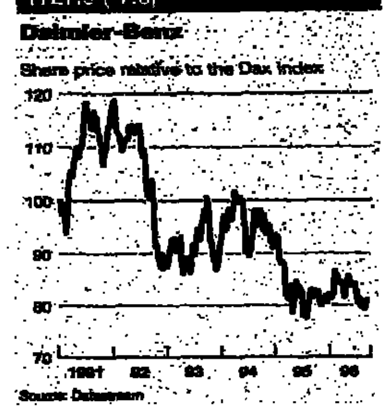
There would inevitably be teething problems with the transition, which awkwardly coincided with peak activity in Russia's seasonal gold mining industry, he said.

THE LEX COLUMN

Olivetti's wake-up call

One of the consequences of Olivetti's massive L2,257bn rights issue last December was to give non-Italian investors 70 per cent ownership of the company. At the time, Mr Carlo De Benedetti, the group's chairman, said that would allow institutional shareholders rather than him to call the shots. He is now being taken at his word. Since the rights issue, Olivetti's share price has continued to perform dismally and shareholders are understandably unhappy. A group, which collectively accounts for a quarter of Olivetti's equity, met in London earlier this week to discuss ways of forcing the company to boost shareholder value. Mr De Benedetti's own continuing role at Olivetti was rightly questioned. This muscle-flexing should not only be good for Olivetti; evidence that Anglo-Saxon shareholders are taking a more active approach to underperforming continental companies could mark a defining point in European corporate governance.

FT-SE Eurotrack 200:
1727.9 (-7.6)



Daimler-Benz

Daimler-Benz is back in profit. But the group has a long way to go before it measures up to its own targets, let alone its international peers. Daimler will be lucky to manage a 6 per cent return on capital this year, compared to its 12 per cent goal and the 20 per cent regularly achieved by General Electric of the US – the favourite company of Daimler chairman Mr Jürgen Schrempp.

The past year's drastic rationalisation will get Daimler part of the way there. Today's stronger dollar and a recovery in aerospace orders will also help. It is possible, therefore, to see operating profits of DM6bn, equating to a 12 per cent return, in 1998. But that does not make Daimler a growth company. Nine tenths of sales come from the cyclical and highly competitive vehicle and aerospace markets. The luxury car business is mature and Mercedes' move into smaller cars is fraught with risks for its brand. In European trucks, Daimler is losing a fortune despite market leadership, while Dasa aerospace still needs a convincing military partner.

It would be unfair to expect management to tackle all these problems at once. It has already produced dramatic changes and the introduction of US accounting, rigorous performance criteria and share options is focusing the group on the bottom line. But it will be a while before Mr Schrempp can look GE chairman Mr Jack Welsh straight in the eye.

Jardine Fleming

Jardine Fleming has had a lucky escape in Hong Kong. Sustained trading irregularities combined with compliance and supervision failures drove Barings out of business. A similar catalogue of ignominy at JF, the joint venture between Robert Fleming and Jardine Matheson, has resulted in little more than some small fines, a $19m compensation payment and substantial egg on the face.

Once more, the dangers of head office losing control of the more distant reaches of the empire are clear. Two main lessons emerge: first, the exciting task of growing the business needs to be matched by similar attention to unglamorous back-up plumbing. Second, globalisation is a concept which extends to companies' compliance procedures. There is no place for the belief that different, lower standards can be tolerated in far-flung markets.

If JF's experience is to serve a useful purpose, it will act as a timely reminder to those managements who failed to learn these lessons of Barings. Investors, meanwhile, should take comfort. Yesterday's news says more about Hong Kong's past than its future. Indeed, regulation of investment management is now on a similar footing to the UK.

Ladbroke/Hilton

There was never any doubt as to the wisdom of ending the 32-year split in ownership of the Hilton brand – it was just a matter of how to stick it back together. The solution reached by the owners, Hilton Hotels Corporation (HHC) and Ladbroke, looks the right one. Revenues will be enhanced through joint marketing of the Hilton brand, bringing Ladbroke hotels into HHC's loyalty programme, and more rapid expansion of Hilton's global hotel network. There should be some cost savings as well – enough for the deal to add £15m to both companies' profits in 1998. If the relationship works, a wholesale merger must be likely eventually.

Ladbroke shareholders who were banking on a bid for the group may not be delighted. Joint ownership of the Hilton brand makes Ladbroke effectively bid proof. And instead of receiving cash from a takeover, investors are now more likely to have to back a rights issue. However, Ladbroke has scored two notable victories. HHC is going to buy a stake, and while this will probably be achieved via an earnings diluting placing of new shares, it demonstrates commitment to the deal and confidence in Ladbroke's share price. More importantly, Ladbroke will be brought in on HHC gaming projects and it can cherry pick investments; given the high returns achievable on US casino projects, this more than makes up for the threat of a cash call. For a claustrophobic HHC, such concessions are probably fair exchange for gaining broader access to the international hotel market.

Rolls-Royce

The good news from Rolls-Royce is that it has set itself a target of doubling return on capital over the next five years. The bad news is that the new target – which equates to 16 per cent after adding back the goodwill that has been written off its capital base – is probably insufficient to stop the aero-engine group destroying shareholder value. The reason is that the aero-engine industry is extremely cyclical: not only are sales highly geared to world economic activity; because of high fixed costs, there is a disproportionate effect on profits. Five years from now may well be the peak of the current cyclical upswing, after which profitability could plummet. In order to cover its cost of capital, Rolls needs to earn an average return of 12 per cent over the cycle. If it only makes 16 per cent at the peak, the prospects of doing so are not great.

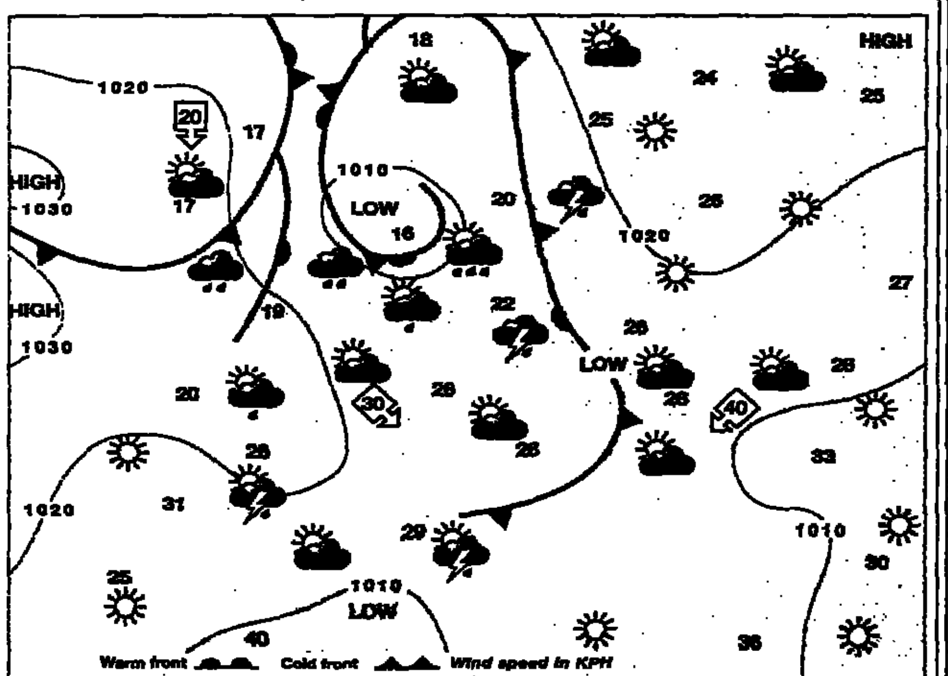
FT WEATHER GUIDE

Europe today

Rain will affect much of the Benelux, Germany and northern France. Central and southern France will have sunny intervals, except for south-western France where showers are likely. A cold front, associated with a low pressure system, will bring rain and thunder showers to Poland. Southern Scandinavia will remain dry, but rain is expected further north. Eastern Spain and the Balearics will have thunder storms. There will be patchy cloud over Italy, the Balkan states and Greece, but most of Turkey will be sunny.

Five-day forecast

Low pressure over the Netherlands will move northwards, bringing rain to Scandinavia. Another front will come inland from the Atlantic towards western Europe, bringing rain to the British Isles. Another low will bring rain to the north African coast.



TODAY'S TEMPERATURES

Situation at 12 GMT. Temperatures maximum for day. Forecasts by Meteo Consult of the Netherlands

	Maximum	Beijing	fair 28	Caracas	fair 31	Faro	sun 26	Madrid	fair 26	Rangoon	fair 32
	Celsius	Belfast	fair 16	Cardiff	cloudy 18	Frankfurt	shower 17	Majorca	thund 25	Reykjavik	shower 11
Abu Dhabi	fair 39	Belgrade	shower 24	Casablanca	sun 23	Geneva	shower 18	Malta	fair 31	Rio	fair 29
Accra	fair 28	Berlin	fair 21	Chicago	sun 26	Gibraltar	sun 25	Manchester	cloudy 17	Rome	fair 26
Algiers	fair 26	Bermuda	fair 29	Cologne	rain 16	Glasgow	fair 17	Manila	shower 32	S. Frsco	sun 23
Amsterdam	shower 16	Bogota	fair 19	Dakar	fair 31	Hamburg	shower 19	Melbourne	fair 15	Seoul	fair 23
Athens	fair 29	Bombay	rain 29	Dallas	thund 32	Helsinki	fair 22	Mexico City	fair 20	Singapore	rain 30
Atlanta	fair 31	Brussels	shower 15	Delhi	fair 35	Hong Kong	fair 30	Miami	fair 33	Stockholm	rain 21
B. Aires	sun 23	Budapest	thund 22	Dubai	sun 38	Honolulu	fair 29	Milan	fair 23	Strasbourg	shower 17
B.ham	fair 19	C.hagen	fair 20	Dublin	fair 17	Istanbul	fair 26	Montreal	fair 21	Sydney	rain 15
Bangkok	rain 36	Cairo	sun 33	Dubrovnik	fair 27	Jakarta	fair 30	Moscow	sun 23	Tangier	fair 26
Barcelona	thund 23	Cape Town	fair 16	Edinburgh	shower 17	Jersey	fair 17	Munich	shower 18	Tel Aviv	sun 32
						Karachi	fair 33	Nairobi	fair 24	Tokyo	shower 25
						Kuwait	sun 43	Naples	fair 26	Toronto	fair 24
						L. Angeles	sun 29	Nassau	fair 32	Vancouver	rain 20
						Las Palmas	sun 26	New York	sun 26	Venice	fair 23
						Lima	cloudy 19	Nice	fair 24	Vienna	thund 22
						Lisbon	sun 28	Nicosia	sun 35	Warsaw	shower 23
						London	fair 21	Oslo	fair 20	Washington	fair 28
						Lux.bourg	shower 14	Paris	fair 19	Wellington	shower 10
						Lyon	fair 19	Perth	shower 18	Winnipeg	fair 30
						Madeira	sun 24	Prague	fair 19	Zurich	shower 15

صكتا من الاجل

FINANCIAL TIMES
COMPANIES & MARKETS
©THE FINANCIAL TIMES LIMITED 1996
Friday August 30 1996

IN BRIEF

Disney and Kirch sign 10-year deal

Germany's aggressive Kirch media group and Walt Disney, the US entertainment group, announced an exclusive 10-year deal under which Disney/ABC International Television will feed material to Kirch's fledgling DF1 satellite service. Terms were not disclosed, although officials said the agreement was one of the most substantial of its kind involving a US company. Page 13

Marketing costs hit Tele Danmark
An increase of DKr524m in marketing costs for cellular phones was blamed by Tele Danmark, the partly-privatised telecoms operator, for a 24 per cent slide in first-half earnings to DKr1.34bn ($234m). The first-half results included one quarter's results from Tele Denmark's 16.5 per cent stake in Belgacom, the Belgian telecoms company, from April 1. Page 12

Hambros seeks Regent Pacific meeting

Hambros, the UK merchant banking group, wrote to its new shareholder, Regent Pacific, inviting the Hong Kong-based investment group to a meeting. The invitation followed the disclosure of Regent Pacific's purchase of a 3 per cent stake in Hambros on Wednesday, when Sir Chips Keswick (left), Hambros' chief executive, said Mr James Mellon, Regent Pacific's head, had been "gratuitously rude" in describing Hambros' performance as "diabolical". Page 15

DAF downgrades full-year forecast
DAF Trucks, the Dutch-Belgian truck producer, reported an 11 per cent increase in first-half net profits from Fl 72m to Fl 80m ($47.9m), but it downgraded an earlier forecast of higher sales and net earnings for the full year, given "the hesitant character of west European sales". Page 12

Repsol blames fall on chemicals
Repsol, the Spanish oil and gas group, blamed a cyclical downturn in chemicals for a first-half decline in attributable net profits to Pta61.45bn ($492m) compared with Pta62.16bn in the same period last year. Page 12

Falling margins hold back Thai banks
Three of Thailand's leading banks – Siam Commercial Bank, Bank of Ayudhya and Bangkok Bank – reported profit growth for the first half which fell short of expectations. Page 13

De Beers blamed for Indian turmoil
Blame for the turmoil in the Indian diamond cutting industry lay with De Beers and its Central Selling Organisation, which is responsible for the international rough (or uncut) diamond cartel, said Mr John Robinson, managing director of Ashton Mining. Page 22

Companies in this issue

A.P.Moller	12	Hurricane Hydroc'bon	3
American Airlines	3	KPMG	12
Anglo American	4	Kia	3
Arthur Anderson	12	Kuoni	12
Astra Int	13	Ladbroke	14, 11
Australian G&L	13	MMI	13
Banco Itaú	13	Maersk Line	12
Bank Hapoalim	12	Mediaset	12
Bank Leumi	12	Mercedes-Benz	11
Bank of Ayudhya	13	Novell	11
Bank of Bangkok	13	PLD Telekom	12
British Airways	3	Reckitt & Colman	15
Codan	12	Regent Pacific	15
Coopers & Lybrand	12	Renison Gold Fields	13
Corporación Mapfre	12	Rentokil	12
DAF Trucks	12	Repsol	12
Daimler-Benz	11	Rolls-Royce	14
Ernst & Young	12	SCA	11
FLS Industries	12	Siam Commercial Bank	13
Fininvest	12	Sophus Berendsen	12
Fortis	12	T&N	14, 11
GEC	14	Tele Danmark	12
GN Great Nordic	12	Telkom	13
Hambros	15	Westfield Holdings	13
Heineken	12	Wickes	15
Hilton Hotels Corp	11	Zlatý Bažant	12

Market Statistics http://www.FT.com

Annual reports service	26,27	FT-SE Actuaries indices	28
Benchmark Govt bonds	20	Foreign exchange	21
Bond futures and options	20	Gilts prices	20
Bond prices and yields	20	London share service	26,27
Commodities prices	22	Managed funds service	23-25
Dividends announced, UK	14	Money markets	21
EMS currency rates	21	New intl bond issues	20
Eurobond prices	20	Bourses	30,31
Fixed interest indices	20	Recent issues, UK	28
FT/S&P-A World Indices	32	Short-term int rates	21
FT Gold Mines Index	28	US interest rates	20
FT/ISMA intl bond svc	20	World Stock Markets	29

Chief price changes yesterday

FRANKFURT (DM)			
Rises			
Gerresheimer	330	+	7
Goldschmidt	640	+	8
Kali & Salz	188	+	4
Falls			
Linde	918	-	5.5
Mannesmann	1252	-	18
Varta	268.5	-	28.5
NEW YORK ($)			
Rises			
Cadence Design	29¾	+	2⅞
Excel Comm	23⅞	+	2¾
Red Lion Hills	27¾	+	3½
Falls			
Amco Fed	50¼	-	2
Nine West	52⅛	-	1⅞
Oakley Inc	41¼	-	1¾
LONDON (Pence)			
Rises			
Brammer	569	+	17½
Stagecoach	523½	+	16
Surrey Free	313½	+	23½
Falls			
First [illegible]	93	-	10
Heath (Sam)	135	-	15
Meyer Intl	405½	-	10½
TORONTO (C$)			
Rises			
Biovail	41.0	+	3.1
Mentor Expl	15.0	+	1.0
Sudbury Contac	15.8	+	0.85
Falls			
Gachets	47.65	-	2.65
[illegible]	30.05	-	1.3
Scintrex	25.0	-	0.8
PARIS (FFr)			
Falls			
Air Liquide	864	-	11
Alcatel	390.8	-	7.2
Carrefour	2570	-	44
Danone	702	-	12
Geophysique	328.1	-	11.9
L'Oreal	1600	-	34
TOKYO (Yen)			
Falls			
Atsugi Nylon	490	-	19
Calpis Food	771	-	28
Hitachi Cable	810	-	25
Koito Manf	733	-	18
Mazda Mtr	503	-	26
Nissin Elec	701	-	29
HONG KONG (HK$)			
Rises			
Midas Print	1.07	+	0.11
Qingling Mtrs	3.05	+	0.15
Semi-Tech	12.7	+	1.3
Falls			
Fairyoung Hldg	3.0	-	0.37
Grande Hldgs	2.4	-	0.4
Tomson Intl	0.7	-	0.2
BANGKOK (Baht)			
Rises			
Head Trip	45.5	+	4.0
SP Suzuki	52.5	+	4.5
Thairung	135.0	+	11.0
Falls			
Karat Sanitary	70.0	-	3.0
Lanna Lignite	206.0	-	8.0
Siam City	187.0	-	6.0

New York and Toronto prices at 12.30pm.

Daimler hints at management shake-up

By Wolfgang Münchau in London

Mr Jürgen Schrempp, chairman of Daimler-Benz, yesterday hinted that he was considering an organisational and management reshuffle that would fit the company's leaner corporate image.

The prospect of further reorganisation at Europe's largest industrial group came as it reported a return to profitability with interim pre-tax profits of DM782m ($534.8m), compared with a loss of DM1.57bn a year earlier. The results were ahead of expectations because of a large tax credit.

In the past few days both Mr Schrempp and Mr Helmut Werner, chairman of Mercedes-Benz, the car and truck maker, have suggested it was inconceivable for Daimler's structure to remain unchanged.

A move to reduce management layers is widely seen as necessary. Daimler having slimmed from 35 units to 25.

Mr Schrempp yesterday said the second half would be as good as the first and probably better. He underlined that Daimler had emerged from last year's difficulties, caused by heavy losses in its regional aircraft and industrial businesses.

Audi, the Volkswagen unit, announced a 57.6 per cent rise in first-half pre-tax profits to DM405m. Sales rose 13.2 per cent to DM9.31bn.

Production rose 8.3 per cent to 238,105 cars, while customer deliveries climbed 6.3 per cent to 246,597 cars.

Mr Herbert Demel, Audi chairman, said Audi was "making quick progress towards globalisation. In the first half, we sold cars in 105 countries. A year ago, this was only 90."

Mr Schrempp said the dismantling of AEG, the industrial group, and Daimler's withdrawal from Fokker and Dornier, the regional aircraft makers, would be followed by a drive to lift profitability.

Mr Klaus-Jürgen Melzner, motor analyst at Deutsche Morgan Grenfell, said Daimler "is moving in the right direction, but they still have a few problems left to sort out, such as the west European truck business, MTU [the aero-engine group], and Temic [the microelectronics unit]".

Problems at Temic, formerly part of the defunct AEG, were connected to price cuts for microchips. Mr Schrempp said.

He warned: "This management has become incredibly impatient about loss-making subsidiaries. I am sure they won't test our patience."

Daimler-Benz Aerospace, the aerospace and defence unit, cut its losses sharply from DM1.62bn in the first half of last year, to DM677m this year. Mercedes-Benz has remained the most profitable unit, contributing DM1.41bn to operating profits, against DM1.37bn.

Mercedes this week started what it considers a critical initiative to restore the profitability of its west European truck operations with the launch of the Actros heavy-duty model.

Daimler-Benz also reported that operating profits for the first six months had been DM827m, against a loss of DM613m. Total revenues rose from DM49.3bn to DM49.7bn.

Lex, Page 10

Hasty exit for Novell chairman

By Tom Foremski in San Francisco

Novell, the leading network software group, announced yesterday the surprise resignation of Mr Robert Frankenberg, its chairman, president and chief executive.

He was appointed almost 2½ years ago and presided over the divestiture of the company's Unix and business applications groups.

The company said it had begun a search for a chief executive and that Novell board member Mr John Young had been appointed chairman. Mr Joseph Marengi, former Novell vice-president of worldwide sales, is the new president.

Novell's board is understood to have been seeking a more "aggressive" chief executive for some time. Since the beginning of this year it has taken a more direct role in running the company, helping Mr Frankenberg to craft a business strategy that would move it forward.

Robert Frankenberg: moved quickly to focus the group

Mr Frankenberg's departure comes as Novell faces increasing competition from developments in the Internet and Intranet markets, and from Microsoft, which is aggressively selling its Windows NT operating system that competes with Novell's Netware operating system on networks.

"I'm surprised by Frankenberg's resignation. It comes just as Novell seems to have got its act together and found some focus. This will create a lot of turmoil. It will generate fear, uncertainty and doubt within its customer base, its resellers, and application developers. Novell needs the application developers to create software for its products," said Mr Stan Schatt, industry analyst at Computer Intelligence Infocorp, the US market research company.

The announcement included no comment from Mr Frankenberg who was not available for interview.

Mr Frankenberg was appointed chief executive in April 1994. He quickly began focusing the company on its core network software business after a disastrous attempt to compete with Microsoft in the operating system and business applications.

Over the last year, Novell sold its Unix business and most of its business applications from its $1.4bn acquisition of the WordPerfect software group in 1994.

Novell continues to hold the leading market share for network software with its Netware product line, which has about 60 per cent of the market. It recently introduced a line of software products to take advantage of business opportunities in the Intranet market.

Mr Young, Novell's new chairman, was previously Mr Frankenberg's boss at Hewlett-Packard.

Novell's shares at mid-session were down $⅜ at $10½.

Hotel groups reunite Hilton brand

By Scheherazade Daneshkhu, Leisure Industries Correspondent

Hilton Hotels Corporation of the US and Ladbroke, the UK group that owns the Hilton name outside the US, have agreed an alliance that reunites the Hilton brand worldwide.

The two companies have agreed to market and develop Hilton jointly worldwide to cover the 400 Hilton hotels in 49 countries.

HHC will also take a 5 per cent stake in Ladbroke, and the two sides have the right to buy into each other's companies up to a 20 per cent maximum.

Mr Stephen Bollenbach, the US company's chief executive, will sit on Ladbroke's board while Mr Peter George, Ladbroke's chief executive, is to join the HHC board.

Peter George (centre), head of Ladbroke, and HHC's Stephen Bollenbach in London yesterday

Picture: Ashley Ashwood

Hilton International was spun off in 1964 and Ladbroke acquired it in 1987 for £646m ($1bn).

Mr Bollenbach and Mr George, speaking in London as Ladbroke reported better than expected interim pre-tax profits of £64.2m, said the talks had also considered a joint venture and even merger.

HHC has a market capitalisation of $5.2bn. Ladbroke's shares rose 3½p yesterday to close at 209½p, giving a market capitalisation of £2.4bn.

Mr George said the alliance would give a lot of the benefits of a merger without the costs and disruption. He expected it to result in tens of millions of dollars of benefits for each company from 1998.

HHC's HHonors loyalty programme will be extended to Hilton International's hotels and a jointly-owned company will cover sales and marketing and develop a single logo.

The two companies will also take 20 per cent of the profits in each other's new hotel developments in exchange for a 20 per cent contribution to any required capital investment.

Ladbroke now has the opportunity to participate in HHC's gaming operations in the US and elsewhere. Ladbroke has been trying to expand its gaming interests in the US.

Mr Bollenbach said the 5 per cent stake in Ladbroke was "large enough to demonstrate our commitment but not so large that it would take away our ability to make other investments". Mr George said it was "possible" that Ladbroke might issue new shares to HHC.

Ladbroke is to increase its hotel investment and intends to free up resources by accelerating the sale of the remaining £250m tied up in property assets.

Mr Paul Slattery, leisure analyst at Kleinwort Benson, said: "It's a peach of a deal. The inevitable end point is the two companies coming together entirely."

Mr John Rohs, analyst at Schroder Wertheim, described the alliance "a brilliant move to put Humpty-Dumpty back together again".

Lex, Page 10; Results, Page 14

Olivetti holds surprise meeting with investors

By Alan Cane in London

Shareholders representing about 25 per cent of Olivetti's stock forced an unprecedented meeting in London this week ostensibly to break down communication barriers between themselves and the loss-making Italian information technology and telecommunications group.

While those at this week's meeting played down any suggestion of confrontation or threats to the position of Mr Carlo de Benedetti, chairman and architect of the modern Olivetti, the meeting underlines shareholders' anxieties about the future of the company which has lost L3,900bn ($2.6bn) since 1990.

The shareholders, including Baring Asset Management, Singer & Friedlander Investment Management and Nomura Capital Management, were principally concerned about Olivetti's reluctance to engage in consultation and communication with its investors.

The Italian group's management has undergone significant changes recently with the departure of former managing director Mr Corrado Passera, the appointment of Mr Francesco Caio to that role and the decision of Mr de Benedetti to step back from day-to-day executive duties. Shareholders complained they had been neither informed or consulted about the rationale for these moves.

A broad range of issues were discussed but no votes were taken nor ultimatums put to the company, investors said. Olivetti said the meeting was "part of the normal practice of running a public company".

The Italian group is in the process of transforming from an office equipment and personal computer manufacturer to an information technology group with strengths in computing services and telephony.

Yesterday, the shares rose L8.1 to close at L791.1 reflecting good progress made at Omnitel, its 41.3 per cent owned mobile phone subsidiary.

Lex, Page 10

SCA slides in first half and warns for year

By Hugh Carnegy in Stockholm

Sweden's SCA yesterday became the latest pulp and paper group to report a big drop in profits in the first half of the year and warned that the trend of falling earnings was unlikely to turn around before the final quarter.

SCA, which earlier this week retreated from the French disposable baby nappy market to stem losses there, said group profits after financial items fell to SKr1.67bn ($252m) in the first six months from SKr2.95bn last year. Net earnings per share fell from SKr9.59 to SKr5.03.

The decline continued in the second quarter when profits slumped from SKr1.43bn at the same stage last year to SKr659m.

First-half earnings were hit by negative currency effects to a total of SKr260m. But the chief culprit was the big fall in prices which has hit the sector, notably for pulp, fine papers, magazine papers and liner products. In the second quarter alone, the gross impact of lower prices was SKr998m, although about 75 per cent was offset by lower raw material prices.

Mr Sverker Martin-Löf, SCA chief executive, said prices appeared to have bottomed out for most products, but the effects had not yet been felt. "This means the third quarter will probably be the year's weakest," he said. "How the fourth quarter will be is hard to say, it depends on how quick the turnround is."

The first-half result was below most analysts' expectations and SCA's most-traded B-share ended the day down SKr1.50 at SKr143.

The strongest result came in the hygiene products division, the group's biggest unit. SCA moved to strengthen the division further this week when it swapped its Peaudouce nappy brand in France with Kimberly-Clark of the US, in exchange for Kimberly-Clark's tissue plant in Prudhoe in northern England.

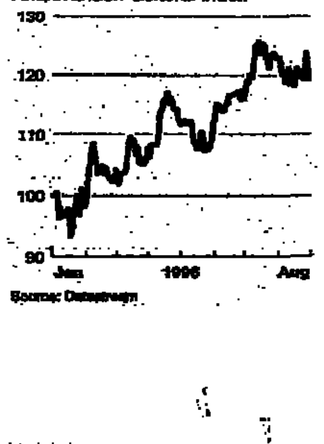
The hygiene division, which includes nappies, tampons, toilet paper and tissues, doubled operating profits in the first half from SKr593m to SKr1.03bn. This disguised losses in the French branded nappy operations, hit by a price war with Kimberly-Clark and Procter & Gamble.

SCA's weakest results came in the fine papers and pulp operations, which fell to an operating loss of SKr267m in the first half, compared with a profit of SKr689m last time.

Pulp futures bourse, Page 22

SCA

Share price relative to the Affärsvärlden General Index



Source: Datastream

Marketing costs hurt Tele Danmark

By Hilary Barnes in Copenhagen

First-half profits at Tele Danmark, the partly-privatised telecoms operator, slid 24 per cent from DKr1.76bn last year to DKr1.34bn ($234m), with earnings per share falling from DKr3.42 to DKr0.23.

Mr Hans Munk Nielsen, finance manager, called it "an unsatisfactory result". The fall was expected after a profit warning in July.

The decline was ascribed primarily to an increase of DKr524m in marketing costs for cellular phones. Lower marketing costs and higher transmission income in the second half, said Mr Nielsen, would allow the group to report "satisfactory" operating profit for the full year.

The net profit for the year, however, will be lower than 1995's DKr3.49bn, as net financial income is not expected to reach last year's exceptional DKr1.14bn.

The first-half results included one quarter's results from Tele Denmark's 16.5 per cent share in Belgacom, the Belgian telecoms company, from April 1.

Belgacom added DKr1.05bn to Tele Danmark's turnover, which increased from DKr9.41bn last year to DKr10.94bn, and DKr152m to pre-tax profits, which slipped from DKr2.73bn to DKr2.17bn.

About 20 per cent of Tele Danmark's turnover now arises from operations outside Denmark, which besides Belgacom include several shares in cellular phone companies in eastern Europe.

Mr Gregers Mogensen, international manager, said only one other European company, Spain's Telefónica, has a higher share of foreign turnover.

The Danish company aims to continue to expand its foreign operations. It is discussing the possible acquisition of a share in a European cellular operating company from an American phone company, which Mr Mogensen declined to name.

The investment in marketing mobile phones contributed to a 69 per cent rise to 770,000 in the number of subscribers to Tele Danmark's cellular service in the 12 months to June 30. Transmissions rose 26 per cent in terms of minutes used.

Mr Hans Würtzen, chief executive, said the group expected to win back the marketing costs through increased transmission revenue within two years.

Tele Danmark in its present form is based on the merger of five regional companies, but Mr Würtzen said yesterday that the group has not yet obtained sufficient rationalisation gains from the merger, more particularly because staff reductions have not taken place as rapidly as expected.

The total number of employees fell from 17,332 in 1992 to 16,499 by June 30, but the latter figure showed a small increase compared with June 30 last year.

● GN Great Nordic, the tele communications and manufacturing group, has increased its share in Denmark's second cellular phone operator, Sonofon, to 51 per cent by acquiring a 15 per cent stake from the Danish venture capital company, Incentive.

GN will pay DKr414m for the share. GN's first half turnover increased from DKr928m to DKr1.23bn, mainly as a result of a rise in turnover by Sonofon from DKr63m to DKr353m. First half pre-tax profit were unchanged at DKr120m.

DAF Trucks ahead but downbeat

By David Brown in Amsterdam

DAF Trucks, the Dutch-Belgian truck producer, yesterday reported a 10.7 per cent increase in first-half net profits, to Fl 80m ($48.3m), but downgraded an earlier forecast of higher sales and net earnings for the full year.

Noting "the hesitant character of west European sales", the group said it expected full-year turnover and profits to be at about the same level as in 1995, when it reported a 33 per cent increase in its net profits to Fl 163.8m.

The company, salvaged in a radically slimmed-down form by the Dutch and Belgian governments after a collapse in 1993, said the European market for heavy trucks weighing more than 15 tonnes advanced 8.5 per cent to 96,500 units.

DAF Trucks said it was able to increase its own share of this market from 8.8 per cent to 9 per cent. DAF produced 8,700 vehicles in this class, 12 per cent more than in the same period a year earlier, and expects to produce between 17,500 and 18,000 vehicles in the year as a whole.

In the market for trucks above 6 tonnes, DAF said demand grew 6 per cent – or 137,000 units – while its own production rose 8 per cent, to 12,000 trucks. The company's market share grew from 8.6 per cent to 8.8 per cent.

DAF Trucks reported 11.9 per cent higher turnover of Fl 1.47bn, up from Fl 1.32bn, and said its operating profit before financial items advanced 13.9 per cent to Fl 115.7m.

Mr Cor Baan, DAF Trucks president, described these developments as "healthy" but warned of strong pressure on profit margins, which was only partly offset by favourable exchange rate developments.

The half-year results were announced in conjunction with the opening of a new, highly automated Dutch assembly plant designed to further trim unit production costs and increase flexibility. Mr Baan said that investments in the first half almost doubled to Fl 47m, and suggested that the group planned to announce a new range of truck models in the near future.

Mr Baan added that the group had been able to negotiate more favourable terms for an Fl 500m revolving credit facility. He said this was a mark of bank confidence in the company's future, and added that the facility would enable DAF to finance "strategic plans" and reduce financial costs.

Russian telecom group posts first profit

By Alan Cane

PLD Telekom, a telecommunications group quoted on the Nasdaq and Toronto stock exchanges and operating exclusively in Russia and Kazakhstan, made an operating profit of $537,000 in the first half of 1996.

It is the first operating profit announced by the group, formerly Petersburg Long Distance, since its formation in 1995. Financing and amortisation charges resulted in a net first-half loss of $2.8m, unchanged from the deficit recorded in the same period last year.

Total revenues in the period rose to $35.6m, a 62 per cent increase on the $15.8m recorded last time. The company expects to be profitable by the end of 1997.

Mr James Hatt, PLD chief executive officer, said foreign investment in the group's market areas was leading to increased demand for telecommunications services. "We continue to focus on the underdeveloped long-distance market," he said. "There has been steady growth in traffic on the networks, reflecting demand for basic telecommunications services. We are actively developing value-added services such as Internet access and data transmission."

PLD operates PeterStar, a digital fibre optic network in St Petersburg, BECET International, a cellular telephony company in Kazakhstan, and the Moscow-based Technocom/Teleport, which provides dedicated international long-distance services.

Earlier this year PLD completed the first high-yield bond offering by a Russian company. Investors included Cable and Wireless of the UK and Merrill Lynch.

Hapoalim posts profit down 5.2% in first half

By Ilene Prusher in Jerusalem

Bank Hapoalim, Israel's largest financial group, yesterday reported net profits down 5.2 per cent in the first half of 1996, from $134.3m in the first half of last year to $127.3m.

Second-quarter net profit fell from $64.3m in the year-earlier period to $63.6m. Quarterly earnings fell to 33 cents a share, from 35 cents a share in 1995.

The decrease was a result of a devaluation of the shekel, major contributions to lost debt, and an increase in expenses.

Bank Hapoalim shares fell 0.50 per cent in trading on the Tel Aviv Stock Exchange.

In a separate development, Bank Hapoalim agreed to sell almost 24 per cent of Poalim Investments to Dovrat Shrem & Co.

Israeli banks are legally required to reduce their stakes in non-banking companies to a maximum of 25 per cent of their holdings by the end of 1996.

Bank Leumi, Israel's second-largest bank, said that its net profits in the second quarter jumped 38.6 per cent to Shk112.4m ($35.7m), compared with Shk81.1m in the same period a year ago.

But net profit for the first half of the year dropped to Shk217.1m, a decrease of 20.2 per cent on the Shk272.1m last year.

Profits for the first half of 1996 were affected to a large extent by a one-time provision of Shk185m, which was made in order to cover expenses incurred by the bank's voluntary retirement scheme.

Bank Leumi also announced that over the past two days it had bought 10 per cent of Africa Israel Investments increasing its stake in the conglomerate to 65 per cent of voting rights.

Anticipation of the transaction meant that shares in Africa Israel climbed 20 per cent since Wednesday.

Blocking up exits in the cradle of double entry

Fresh ground will be broken tomorrow in the birthplace of double-entry bookkeeping when the Italian names of accountants Coopers & Lybrand completes its first year as a joint stock company.

The move from partnerships, in which partners place their personal wealth on the professional liability line, to limited liability signals a growing mutual distrust between auditors, their clients and the regulators. And three other Big-Six accounting firms in Italy (Arthur Andersen, KPMG and Ernst & Young) have followed Coopers & Lybrand's lead.

Earlier this year Consob, the companies and stock market regulator, revoked Coopers & Lybrand's three-year appointment as auditors of Gemina, the Milan conglomerate that reported surprise heavy losses last autumn.

They are not alone in falling foul of Consob, against whose decision they are appealing – both KPMG and Price Waterhouse have suffered official revocation of appointments.

Moreover, KPMG and Price Waterhouse have also been subject to damages actions by former clients. When Banco di Napoli's shareholders approved a salvage plan at the end of July, after losses of L3,200bn ($2.12bn) last year and L1,100bn in 1994, they decided to seek damages from Price Waterhouse, the bank's auditors until 1994.

Mr Alberto Giussani, senior partner at Price Waterhouse, considers that there is confusion over roles. "Banks' managements are responsible for managing loan risk. They are to blame if banks lose, not the auditors," he says.

Mr Giussani believes the bank will have difficulty in finding grounds for claims. Indeed, even Banco di Napoli's general manager, Mr Federico Pepe, admits he has no idea about the basis for a damages action, the amount that will be sought or when the action will start.

Price Waterhouse also faces damages suits from Montedison and its Ferruzzi Finanziaria parent, which collapsed under a mountain of debt in June 1993. Two years ago the former clients started actions for damages from the auditors totalling L1,650bn; the accountants counter-claim that they were victims, duped – like investors – by company management.

Ferruzzi Finanziaria, Montedison, Banco di Napoli and Gemina have all rocked the market over the past three years with accounts that have left shareholders wondering what has been going on. Last autumn's ructions at Gemina were not the end: in June, Reconta Ernst & Young, Coopers & Lybrand's successors as independent auditors, had to issue a modification to their earlier certification, reporting increased losses. The "sindaci" (board of statutory auditors), meanwhile, withheld a favourable opinion.

Mr Pellegrino Libroia, the Reconta Ernst & Young partner who signed Gemina's accounts, complains that independent audit in Italy suffers because auditors can only give or refuse certification. The qualifications "subject to" and "except for", used in the US and UK, are not allowed. Mr Libroia says the firm's comments were equivalent to heavy qualification, but "this may not be clear to the investor, who wrongly believes that certification is the same as a clean opinion".

Part of the problem is that Italians expect auditors to sniff out cooked books, although accountants insist their job is more modest, just checking that financial statements are drawn up in accordance with accounting principles and agree with records.

However, many accountants privately admit that there is also a question about the quality of audit work, after a savage fee war. Growth means winning clients from other firms, either when three-year appointments expire, or when Consob ejects sitting auditors.

This is a matter of such concern that Consob entered the fray this spring, giving instructions to the 26 authorised audit firms on how fee calculations should be made.

Banco di Napoli is an example. Mr Giussani says Price Waterhouse earned fees of L706m for auditing the 1994 bank and consolidated accounts. The present auditors, Reconta Ernst & Young are believed to earn about half.

Firms' transformation into joint stock corporations will limit the pain if clients sue. Few would bet that the suffering has finished, however.

David Lane

Percentage of audit hours

Position	Hours
Partner	4-7
Manager	14-17
Senior	25-35
Assistant	41-57

* Consob recommendations (% of total hours)

Share Capital (Lbn)

KPMG	8.3
Coopers & Lybrand	4.6
Arthur Andersen	3.0
Reconta Ernst & Young	1.6

Chemicals take blame for Repsol setback

By David White in Madrid

Repsol, the Spanish oil and gas group, blamed a cyclical downturn in chemicals for halting its profit growth in the first half of the year.

Attributable net profit was 1.1 per cent down at Pta61.45bn ($492m) compared with Pta62.16bn in the same period last year. Sales also declined fractionally, by 0.7 per cent to Pta1,296bn, and consolidated operating profits fell almost 14 per cent to Pta96.05bn.

The setback, which was expected by analysts, comes as the Spanish government is contemplating selling its remaining 10 per cent shareholding in the group, which is now mainly in private hands. Under the terms of the last privatisation operation earlier this year, a new public offering is ruled out before next February, however.

Repsol shares closed Pta25 higher in Madrid at Pta4,110 yesterday, beating a generally lower trend.

Chemicals profits tumbled by two-thirds to Pta13.13bn after reaching Pta41.34bn in the first half of 1995, an all-time record for the company. However, the two periods are not really comparable because of the cyclical nature of the business. Repsol attributed the lower figure mainly to narrower margins on basic petrochemicals and intermediate products.

Sales fell owing to a 25-day shutdown at its ethylene cracker at Puertollano, south of Madrid, to the absence of an economic pick-up in Germany, and to slack consumer demand in Spain. However, it said that the trend in the sector had improved in recent months.

Profits from refining and marketing, on the other hand, climbed to Pta36.98 from Pta29.64bn, a rise of nearly 25 per cent. Repsol said that the improvement would have been even greater but for strike action at the Petronor subsidiary's plant near Bilbao and the impact of the petrol price war in the UK, which affects the calculation of maximum prices set by the Spanish authorities.

Exploration and production activities showed a 6 per cent increase in operating results to Pta10.59bn, reflecting the increase in average crude oil prices during the six months. Profits from the group's gas activities were almost 10 per cent up at Pta35.9bn, on higher natural gas sales, especially to the industrial market.

Rival Spanish oil group Cepsa, in which Elf-Aquitaine of France has a stake of about 40 per cent, fared worse in the first half with a fall of over 20 per cent in net profits to Pta9.19bn, against Pta11.56 in the same 1995 period.

This was despite a 6 per cent growth in sales to Pta547.77bn. The company blamed the slide in profits on the fact that retail prices had failed to reflect the higher cost of crude.

Heineken aims to refresh parts of Slovakian brewer

Dutch controller has provided technology and marketing

East of Bratislava and south of the Danube lies Slovakia's agricultural heartland, where prairie-flat fields of corn stretch for miles. It is also home to an intriguing foreign investment – Heineken's purchase of a controlling 66 per cent stake in Zlatý Bažant, the biggest Slovak brewery.

Last October when the Dutch brewing group bought its stake, Zlatý Bažant – which means The Golden Pheasant – was losing money; its share of the domestic market in 1995 fell to 8 per cent from 15 per cent in 1994, owing to a taste for foreign beers, increased competition from domestic rivals and a sharp fall in output during a restructuring.

Yet Mr Marc Bolland, Zlatý Bažant general director, is convinced Heineken is on to a winner, citing Slovakia's beer culture, annual per capita consumption of 100 litres, and that the beer is the most widely distributed in the country. He believes the brand, although not well known outside Slovakia, can be marketed successfully in central Europe. "A brand name is the most important thing to buy and Zlatý Bažant offered the best opportunities in this market," Mr Bolland says.

Mr Bolland will not disclose what Heineken paid for its stake in what is regarded as a modern brewery with up-to-date production facilities.

Bankers in Bratislava believe the acquisition cost was not high and that much of the investment will be in streamlining production, developing the brand name at home and abroad, and turning it around financially. "It was not a profitable brewery when we bought it and we're trying to make it profitable as quickly as possible," Mr Bolland says.

To get sales back on track Heineken has closed one bottling line, upgraded others and taken measures to overcome the brewery's inability to maintain a consistent quality. It has also redesigned the familiar logo of the golden pheasant to make it more prominent and a little less mechanical.

"The craftsmanship is here," Mr Bolland says. "We can bring Heineken technology to give [the beer] a consistently high quality. We also bring added value in sales and marketing."

Zlatý Bažant has a capacity of 1m hectolitres. Its output in 1994 was 670,000hl, but this fell to 370,000hl in 1995. This year it should be between 450,000hl and 500,000hl, and sales are recovering. Mr Bolland says the brand captured 10 per cent of the domestic market in the first half of this year. Getting domestic sales back to 15 per cent will take "two to three years".

Heineken is also aiming to export Zlatý Bažant more widely, exploiting the image of the pheasant, king of farmland birds, in its marketing drive.

But can a Slovak beer, lacking the reputation of Czech brands such as Pilsner Urquell and Budvar, sell abroad? Mr Bolland is cautiously optimistic. "It would be an overstatement to predict that this would be a leading brand. But it has a particular niche."

He rejects the view that Heineken bought Zlatý Bažant because it was unable to buy a Czech brewing group. Bass, a leading international rival, has established a formidable position in Czechoslovakia through Prague Breweries and its recent purchase of 20 per cent of Radegast, while Plzeňský Prazdroj and Budvar are not for sale.

Mr Bolland smiles at the suggestion. Even if Zlatý Bažant is considered an exotic brand from an unknown country, "an 'exotic brand from somewhere' is a good place to start," he says. "The potential is there. Slovakia is perceived as having a good brewing background."

Vincent Boland

Golden pheasant: set to be introduced to Central Europe

NEWS DIGEST

Maersk Line lifts AP Moller in term

A strong performance by the Maersk Line global container shipping services improved first-half operating profits at A.P.Moller, which has shipping and oil and gas interests. Maersk Line, the world's leading container carrying operation, said its two new liner vessels, each able to carry more than 6,000 20-foot containers, contributed to "a significant increase" at its container division, which has also benefited from close co-operation with Sea-Land Service, the US shipping group.

Moller said operating profits in oil and gas were level with last year's, but a negative foreign exchange adjustment of DKr175m ($31m) meant the net result was lower. The net result from shipping activities in the second half would be in line with last year's DKr1.09bn, the company said. Profits from the oil and gas business would be unchanged from last year's DKr712m, with the total group result also equalling that of last year, at DKr1.80bn. *Hilary Barnes, Copenhagen*

Kuoni forecasts record year

Kuoni, the big Swiss tour operator, doubled first-half net income to SFr13.8m ($11.6m) and is forecasting record net profits of SFr60m for the current year. The travel group, which has about a third of the Swiss market and a sizeable UK business, appears to be one of the few companies prospering in an international travel market characterised by overcapacity and price wars.

First-half results were helped by a sharp fall in losses at its Swiss and other continental European businesses, which accounted for more than three quarters of the group's SFr1.5bn sales. The UK business, which has traditionally generated the bulk of Kuoni's profits, reported a 18.2 per cent decline in first-half earnings before interest and tax to SFr17.5m, on a marginal decline in sales to SFr223.5m.

Kuoni has a strong cash position and net financial income rose 41 per cent to SFr15.2m. The company, which earns the bulk of its profits in the second half, said it expected full-year sales to rise 15 per cent, fuelled partly by acquisition, and net profits to rise from SFr45.2m to SFr60m. It said its dividend should be "at least the same as last year". *William Hall, Zurich*

Sophus Berendsen ahead

Sophus Berendsen, the Danish services and distribution group which owns a majority 35.8 per cent stake in Rentokil, reported an increase in first-half pre-tax profits of 13 per cent from DKr566m last year to DKr640m ($112m). Earnings per share advanced from DKr16.1 to DKr18.6.

Turnover, which does not include Rentokil, increased 10.6 per cent to DKr3.30bn. Rentokil's contribution to group profits increased from DKr464m to DKr532m. At the start of the year Berendsen owned slightly more than 51 per cent of Rentokil, but in connection with Rentokil's acquisition of its UK rival BET, Berendsen's stake was reduced to 35.8 per cent.

Rentokil is now entered in the accounts as an associated company and not a subsidiary. Profits before earnings by associated companies increased from DKr101m to DKr107m, reflecting a DKr16m drop in net financial costs to DKr22m. *Hilary Barnes*

Fininvest cuts Mediaset stake

The Fininvest group, owned by Mr Silvio Berlusconi, the former Italian prime minister, has reduced its shareholding in Mediaset, the television company floated in July. Figures from Consob, the stock market regulator, show Fininvest's stake fell from 52.2 per cent at flotation to 50.7 per cent on 16 August.

Fininvest's shareholding may fall further. The flotation prospectus showed that full exercise of greenshoe and warrants would leave Fininvest with only a 47.9 per cent interest. Fininvest intends, however, to keep a shareholding that ensures control over Mediaset, whose three national channels won 43 per cent of the Italian television audience last year. *David Lane, Rome*

Banking lifts Fortis result

Fortis, the Dutch-Belgian financial services group, yesterday reported first-half net profit up 21 per cent to Ecu366m ($466m), powered by strong results in its banking division, and forecast full-year net profits up at least 10 per cent. The group warned, however, that the second-half growth rate in its banking operation would not equal that of the first half, which was magnified by the operation's comparatively weak showing a year earlier.

The insurance business would further increase its profits, the group said, and the two parent companies, Fortis Amev of Holland and Fortis of Belgium, will each post an increase in earnings per share of "at least" 7 per cent. In the first half, net profit from banking rose from Ecu83m to Ecu106m, while earnings from the insurance activities advanced from Ecu242m to Ecu284m despite a decline in accident and health insurance. *David Brown, Amsterdam*

FLS Industries profit up 36%

FLS Industries, the main business of which is the Danish-American F.L.Schmidth-Fuller cement technology and engineering company, reported a 14 per cent rise in first-half turnover to DKr9.33bn ($1.64bn), while pre-tax profits rose 36 per cent to DKr327m.

The diversified group, whose activities include building materials, packaging, road haulage, and aircraft maintenance, has been held back for several years by losses at FLS Miljo, supplier of flue gas cleansing equipment, and FLS Aerospace, its UK aircraft maintenance group. These, however, showed a better performance in the first half of the year, with FLS Miljo making a pre-tax profit of DKr2m against a loss of DKr14m last year and Aerospace reducing a pre-tax loss from DKr76m last year to DKr43m.

Sales are expected to advance again in the second half and earnings in 1996, which will include a one-off gain from the sale of Danish company Faxe Kalk to Belgium's Lhoist, will be "considerably better" than last year's DKr412m. *Hilary Barnes*

Corporación Mapfre rises

Corporación Mapfre, the listed holding company of the Mapfre group, Spain's largest insurer, reported consolidated ordinary profits up 5.4 per cent in the first six months to Pta7.29bn ($58.3m), with a 14 per cent growth in premiums to Pta170bn. However, extraordinary earnings from a share offering in the group's life assurance arm in the first half of last year meant overall pre-tax profits were 26.5 per cent lower at Pta9.76bn. Attributable net profits fell 23 per cent to Pta5.40bn.

Mapfre Vida, the life assurance company improved pre-tax profits 29 per cent to Pta3.93bn, in contrast to the group's international division, which saw profits tumble 55 per cent to Pta748m. *David White, Madrid*

Investment income helps Codan

Codan, the Danish insurance company controlled by the UK's Sun Alliance, reported a sharp increase in group first-half net profits from DKr87m to DKr557m ($97.6m). Earnings per share rose from DKr13 to DKr82 and return on equity increased from 3.7 per cent to 20.9 per cent. The improvement was chiefly owing to an increase in earnings from investment activities by the general insurance division, which increased from DKr120m last year to DKr372m. *Hilary Barnes*

Kirch signs 10-year Disney TV deal

By Christopher Parkes in Los Angeles

An exclusive 10-year deal with Walt Disney will provide a further link in a newly forged chain of programming agreements between Germany's Kirch media group and US film and television studios.

The terms of the deal, which was announced yesterday, were not disclosed, although officials said the contract, by which Disney/ABC International Television will feed material to Kirch's fledgling DF1 satellite service, was one of the most substantial foreign deals yet signed by a US company.

The duration and nature of the pact – which includes German pay-TV rights to Disney live action films, and a tailor-made version of the premium Disney Channel – suggests that revenues for the US group may exceed the $2.5bn MCA expects to garner from two recent deals in Germany.

Before yesterday's announcement, Mr Leo Kirch, owner of DF1, had committed an estimated DM8bn to programming for the 20-plus channels already in service. According to unofficial estimates, leading Hollywood companies stand to earn revenues of $8bn to $10bn in the next few years from new German agreements alone.

The industry's international TV contracts, worth $3bn last year, are expected to grow 25 per cent a year.

Expansion in Europe's biggest and richest market marks a substantial advance for the Disney Channel, a family-oriented service being used to spearhead a group marketing campaign to sell everything from cinema tickets to stuffed toys.

In the past 18 months the US group has launched custom-tailored versions of the Disney channel in Taiwan, Britain and Australia. Additional channels are due to start in France and the Middle East next year.

Pay-TV rights for films negotiated in the Kirch agreement cover Disney "classics" as well as past and future live action output under the Disney, Miramax, Touchstone and Hollywood Studios labels.

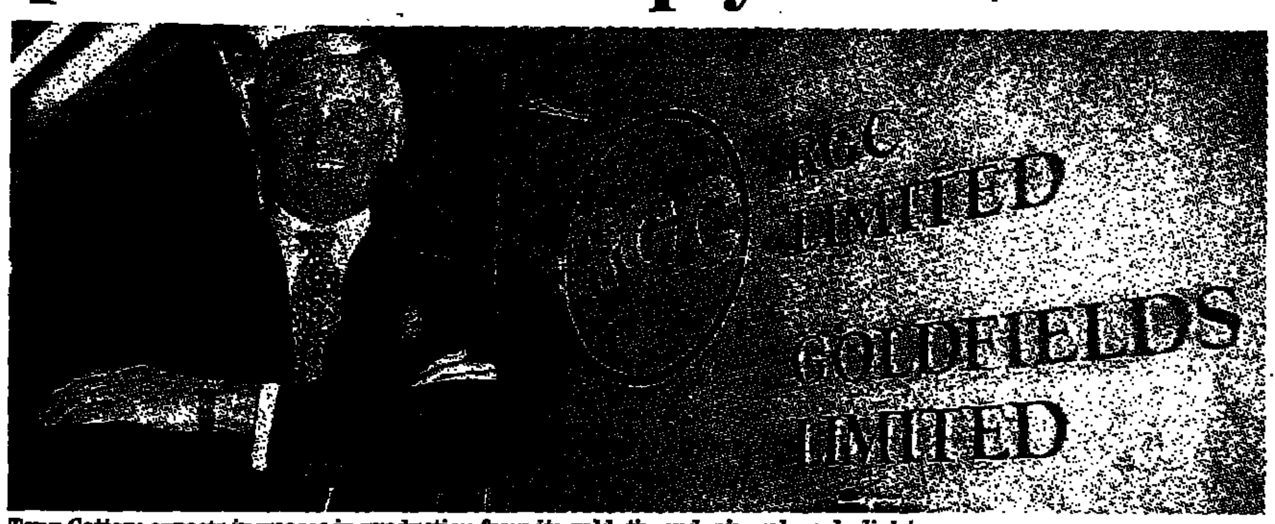
The deal "rounds out our presence in the German TV market," said Mr Etienne de Villiers, president of Disney/ABC International.

Existing links, unaffected by the new contract, include Disney's half-share in Super RT, a 50 per cent stake in programme producer and distributor Tele-München, and smaller holdings in RTL2 and TM3, a cable service aimed at women.

Kirch's catalogue of US partners also includes, Viacom, Sony's Columbia Tristar and Hearst Entertainment.

Renison profits rise sharply to A$76.5m

By Nikki Tait in Sydney



Tony Cotton: expects increases in production from its gold, tin and mineral sands divisions Reuter

Renison Gold Fields, the Australian mining group which is 40 per cent owned by the UK's Hanson group, yesterday reported a sharp rise in after-tax profits in the year to end-June, at A$76.5m (US$60.4m), compared with last time's A$32.9m.

The figures were struck before abnormal items; after these, Renison made A$142.8m, up from A$97.4m. A $66.3m abnormal gain came from the sale of the non-gold assets of Pancontinental Mining, which Goldfields, a company formed by Renison and in which it holds a 56 per cent stake, took over last year.

After that deal, RGC acquired all of Pancon's non-gold assets, retained the Thalanga mine and sold off the rest.

As a result, Renison's 1995-6 results take in earnings from all the non-gold Pancon assets prior to their sale, plus Thalanga for the full-year. These businesses contributed A$23m to the result, compared with only A$100,000 – representing one month's contribution – in the previous year.

Renison's gold interests – held through Goldfields – were lifted by a full year's contribution from the Kundana and Paddington mines, previously owned by Pancon.

But the company said the overall result was helped by an increased contribution from the mineral sands division, which made A$93.3m, up from last time's A$41.5m. There was a reduced loss from Renison Tin – at A$932,000, compared with A$5.66m previously – while the Koba Tin unit made A$3.65m (A$4.71m).

In the current year, Mr Tony Cotton, chairman, indicated that the group expected increased production from its gold, tin, and mineral sands divisions. The last has been lifted recently by the acquisition of Cudgen, whose main asset is a 50.1 per cent controlling interest in Consolidated Rutile.

● BHP, the Australian resources group, said yesterday Commonwealth Bank and Westpac had agreed to continue the current arrangements covering the redeemable preference shares in Beswick, which owns just over 17 per cent of BHP, for up to five years.

Thai banks suffer from falling margins

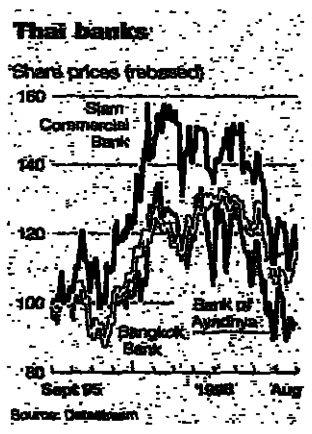
By Ted Bardacke in Bangkok

Some of Thailand's leading banks yesterday reported slower-than-expected profit growth for the first half of 1995. Even banks whose loan growth was stronger than average saw margins fall as a result of increased funding costs.

Siam Commercial Bank, the country's fourth-largest bank, said net profit in the first half was up 15 per cent year-on-year to Bt4.29bn ($170m). Although the highest profit growth among the large Thai banks that have so far reported half-year results, the figure is below analysts' expectations for the bank, which were based on Siam Commercial's loan growth of above 27 per cent, a full 10 percentage points higher than the sector average.

But higher funding costs reduced margins to 3.75 per cent from 3.9 per cent in 1995, according to unaudited results released by the bank.

Mr Olarn Chaipravat, Siam commercial president, recently said competition for wealthy private depositors – who account for about 60 per cent of the bank's total deposits – was getting so intense that the bank had resorted to offering free rides to the airport and buying sprees in exclusive gold shops in order to keep customers.



Bank of Ayudhya, the country's fifth-largest bank, reported net profit in the first six months of 1996 up 4.2 per cent year-on-year at Bt2.46bn. A slowing economy held loan growth to about 17 per cent, while its net loan-to-deposit ratio fell nearly 5 percentage points to 104 per cent – below the industry average of 106 per cent.

There was a similar story at Bangkok Bank, Thailand's largest, which earlier in the week posted first-half net profit of Bt10.34bn, up 6.8 per cent from the same period a year before.

Bangkok Bank's loan growth was about 10 per cent for the period. Its spread in the second quarter was 3.6 per cent, up from first-quarter figures of 3.1 per cent, as the bank cut fixed deposit rates by nearly one full percentage point during the second quarter.

It acquired Bt60.9bn in new deposits in the first half and lent out only Bt34.4bn, leading analysts to expect a surge in loan growth if lending rates fall.

NEWS DIGEST

Astra held back by 'national' car

Astra International, Indonesia's largest car manufacturer, yesterday reported flat net income for the first half of this year as car sales dipped ahead of the arrival of Indonesia's new "national" car. Astra, which is Indonesia's sole distributor for Toyota, BMW, Daihatsu, Isuzu, Peugeot and Fiat, reported net income up slightly to Rp182.83bn ($78m) from Rp181.04bn for the same period last year. Car sales dropped 21 per cent to 76,441 units, in line with a 15 per cent decline in domestic demand for all makes, to 152,753 units.

Net revenues were up 15 per cent year-on-year at Rp6,233bn. The company's automotive division contributed Rp4,563bn of that total, followed by the heavy equipment division's Rp954.86bn. The rest came from the agribusiness, electronics and financial services units.

Indonesian buyers are believed to be delaying car purchases ahead of the arrival of the "Timor" national car, a 1,500cc saloon, the first shipment of which arrived yesterday. Under the controversial "national" car scheme, Mr Hutomo Mandala Putra, President Suharto's youngest son, has been awarded tax and tariff breaks to manufacture the car in co-operation with South Korea's Kia Motors. The tax and tariff breaks will allow him to undercut established manufacturers in the country.

Unlike its automotive division, sales of Astra's motorcycles were strong, and the company continues to dominate with a 48 per cent market share.

Manuela Saragosa, Jakarta

National Grid in Malaysia

The Malaysian government has appointed National Grid Group, the UK power company, to investigate the operations of Tenaga Nasional, the Malaysian power utility. The examination will focus on how to avoid power cuts which have bedevilled Malaysia's grid for years. The most spectacular outage was on August 3, when the whole of peninsular Malaysia was without electricity for about 16 hours.

The government will use National Grid's review, which may be completed within a month, to help it decide what improvements are needed. Senior government officials have suggested that a new grid may have to be built.

James Kynge, Kuala Lumpur

AGL cautious despite surge

Australian Gas Light, the country's largest private sector gas distributor, yesterday announced profit after tax of A$124.8m (US$98.2m) for the 12 months to the end of June, up from A$94m in the year-ago period. Revenues were A$962.8m compared with A$867.7m, and earnings per share rose from 33.9 cents to 43.3 cents.

The listed company – which supplies gas within New South Wales and the Australian Capital Territory and is one of the largest owner/operators of natural gas transmission pipelines – has been attempting to broaden its energy interests. It acquired a 50 per cent stake in one of the electricity distribution businesses privatised by the Victorian state government last year.

AGL cautioned yesterday that profits growth in the current year was unlikely to match that of 1995-96. However, he said the company was still looking at profit increases well in excess of inflation. *Nikki Tait, Sydney*

Westfield upbeat after rise

Westfield Holdings, the Australian property group which specialises in shopping centre developments, yesterday posted a A$74.9m profit after tax in the year to end-June, up from A$51.5m last time.

In spite of apparent weakness in the Australian retail sector, Westfield said it was optimistic about the future, claiming demand for space in its own centres "remains strong". It also indicated it was looking at acquisition opportunities in Australia and the US, although it stressed it had no immediate purchasing plans. *Nikki Tait*

MMI on target

MMI, the Australian general insurer in which Germany's Allianz holds 16 per cent, yesterday announced an after-tax profit of A$35.1m in the year to end-June, a 6 per cent increase on the A$33.1m made in the previous 12 months.

The group pointed out that it had already cautioned, when announcing its strategic plan, that 1995-96 would be relatively flat, with profits flowing through in 1997. "We are on track to achieving this result," it said. MMI also indicated it was likely to announce several south-east Asian investment decisions in the current year, with local joint venture partners. *Nikki Tait*

Toronto Dominion flat

Canada's Toronto Dominion Bank posted flat third-quarter earnings, with narrower interest margins offsetting strong growth in non-interest income. Net earnings dipped to C$223m (US$163.14m) in the three months to July 31 from C$225m a year earlier. Per share income rose to 71 cents from 70 cents. The bank recently unveiled plans to buy back 10 per cent of its shares. Return on equity fell to 14.8 per cent from 16 per cent.

Assets rose 12 per cent to C$118.7bn, but lending activity accounted for only one percentage point of the increase, limiting the impact on interest income. Margins were also dented by a recent decline in interest rates.

Mr Richard Thomson, chairman, said "traditional banking businesses have been constrained by . . . slow growth, low inflation and the impact of changing demographics, with the population shifting its focus from borrowing to investing". *Bernard Simon, Toronto*

Sale helps National Bank

National Bank, Canada's sixth largest, posted a 53 per cent gain in third-quarter earnings, to C$97.8m (US$71.4m), or 55 cents a share, from C$64.1m, or 33 cents, a year earlier. The latest quarter included a C$80m gain on disposal of shares in a Chilean bank, partly offset by a special provision for property losses. Together, they represented a gain of 14 cents a share.

Robert Gibbens, Montreal

Itaú awakens dozing Argentine banks

Brazilian bank plans $70m investment in Argentina's retail sector, says David Pilling

At the corner of the avenues Florida and Corrientes in downtown Buenos Aires, a brightly painted, two-storey-high hoarding loudly proclaims: "At this bank, customers are treated well." It seems an awfully big sign for such a small claim.

But in Argentina, where the financial system stagnated as a result of decades of high inflation and where banks have traditionally given short shrift to all but the wealthiest retail customers, the modest proposal threatens to shake bankers from their slumbers.

Its instigator, Banco Itaú of Brazil, is the first Brazilian bank to attack Argentina's retail sector. Itaú, which opened its first branch last October and plans to have 35 operating by end-1997, saw opportunity in the relative backwardness of Argentina's retail banking sector. Between its new venture and its existing corporate banking business, Itaú plans to invest some $70m in Argentina over the next few years.

According to Mr Antonio Carlos Barbosa de Oliveira, general director of Itaú Argentina, only half Argentina's middle-class have a bank account, while its level of financial penetration, measured by loans as a percentage of GDP, is only 20 per cent. In Brazil, where Itaú is the second-largest private bank, financial penetration is 48 per cent.

"We analysed the Argentine market and saw there was a huge potential in the retail sector," he says. "We believe the economy cannot operate with half the middle class continuing to receive their salaries in cash. The requirement for basic banking services, such as debit cards and credit cards, will increase."

Mr Barbosa de Oliveira believes the difference between the neighbouring banking systems arose because of divergent experiences with high inflation. In Brazil, where for years prices were indexed, people used banks to protect the value of their money. But in Argentina "the economy became dollarised and people didn't use banks". Argentine banks thus had little incentive to "invest in technology, modernisation and efficiency".

Only now is this changing, partly as a result of last year's financial crisis which sent several institutions over the brink and unleashed a savage round of mergers and acquisitions. The number of banks fell from 166 to 130. Those that remain, largely unwilling to lend to small and medium businesses, are cautiously expanding their retail portfolio.

Itaú's arrival highlights how much remains to be done. Instead of the fusty, bureaucratic bank typical of Argentina, Itaú offers customers paperless banking in branches staffed by only eight people, fewer than half the local average. Its branches have no back office, freeing staff to attend customers.

Each branch has four ATMs, against one in the typical Argentine branch. Local banks are often jammed with lines of people paying utility bills, because direct debits and cheques are not trusted by Argentines. Itaú ATMs are equipped to read the bar-codes on utility bills, automatically transferring funds from account to utility company. Telephone banking is encouraged.

Such use of technology allows Itaú to keep costs down. The bank became the first in Argentina to pay interest on current accounts.

Fees, although above international norms, are 25 per cent below the average local bank, some of which charge up to $50 a month to maintain a current account.

These initiatives have won grudging praise from local bankers. "They're going in the right direction," says one. "If you want to cut costs you can't have branches with 50 staff . . . Until we can bring costs down, we certainly can't afford to start paying interest on current accounts."

What also distinguishes Itaú is its aggressive pursuit of middle and lower middle class clients. This is the C1, C2, C3 category sorely neglected by Argentine banks. "They're quite right to go for clients from these segments because this is where the bulk of growth will come from," says the local banker. "However, return on investment will be slow."

Mr Barbosa de Oliveira believes Argentine banks are changing, perhaps partly in response to Itaú's arrival. "Some of the banks have altered their advertising approach and have started to emphasise their quality of service. Other banks have extended their hours or lowered their fees."

"There's nothing new in their policy of attention to clients," says the head of a foreign bank operating in Argentina. "Everyone's trying to do that. The main difference is Itaú's excessive, or let's say overwhelming, use of technology. The question is to what extent will Argentines take to totally automated banking?"

Itaú, which has 10 branches operating, says the response of Argentines has surpassed expectations and that it is now opening 2,500 accounts a month. Even so, it will take time before it can rival big local competitors such as Galicia and Río de la Plata, which have 180 branches each and a nationwide network.

"Itaú should not believe that Argentine banks will sit back and let them take over," says the foreign bank head.

Mr Barbosa de Oliveira says he is under no such delusion. "Argentine banks are all working hard to improve their operations," he says. "It's a very competitive market and it will become more competitive in the future."

Telkom advances 45% on strong demand for lines

By Manuela Saragosa in Jakarta

Telkom, the Indonesian domestic telecommunications carrier, said net income in the first half rose 45 per cent as the company's number of lines in service continued to grow along with call volumes on its fixed-line network.

Net income was Rp701.8bn ($229.7m) compared with Rp484.3bn in the first six months of 1995. The company said that demand for telephone lines remained buoyant, lifting operating income 22 per cent to Rp945.7bn.

Telkom added around 395,600 new lines in service, bringing the total to 3.69m, 33 per cent more than a year ago. That figure comprises 1.97m lines in regions of Indonesia controlled by Telkom and 1.72m in regions controlled by private consortia installing and operating new lines.

However, some analysts expressed concern that growth in lines in service may be obstructed in the poorer, outlying regions where connection fees may be seen as too expensive.

Meanwhile, the average pulse per line decreased 6.5 per cent but analysts say this was largely expected, given the dilution caused by the addition of new lines.

Operating revenues from those regions managed by Telkom totalled Rp1,283bn, while the five regions managed by private consortia contributed Rp663.8bn. There is no comparable figure for the same period last year because Indonesian accounting procedures require revenues from the private consortia to be reported on a net basis.

Last week, Telkom announced that it had agreed to lower by 4.4 per cent, to Rp1,395bn, the guaranteed minimum annual revenues it receives from consortia installing and operating new lines in the regions, a figure which is expected to appreciate by 3-4 per cent a year.

For the whole of 1996, however, the figure is slightly lower: Rp1,361bn compared with Telkom's earlier estimate of Rp1,215bn. This reflects the late start-up date for the consortium licensed to install and operate new lines in Kalimantan.

Technology paves way for PC-makers in workstations market

Smaller companies may soon rival the likes of IBM in this field, reports Tom Foremski

As PC technology grows more powerful, new openings are arising in the workstation market. The potential has been great enough to attract leading PC makers such as Compaq Computer, which has announced it will enter the workstation market by the end of this year.

The market for workstations - specialised personal computers with more memory and three-dimensional graphics display normally usually used in engineering and scientific applications – is currently dominated by Sun Microsystems, Hewlett-Packard, IBM, Digital Equipment and Silicon Graphics. But this is set to change.

Until recently, workstations could offer the extra capabilities only by using the Unix operating system and very fast chips known as reduced instruction set computer (Risc) microprocessors. However, with the new version of Microsoft's Windows NT operating system and new Pentium Pro microprocessors from Intel, which almost match the performance of some Risc microprocessors, it is now possible for PC manufacturers to make a workstation that can rival the performance of more expensive, low-end workstations based on Unix and Risc microprocessors.

The NT/Pentium Pro workstation market is growing at a fast rate, with a projected compound annual growth rate of more than 100 per cent over the next five years. By 2000, according to US market research firm Dataquest, the NT workstation market will equal the size of the traditional Unix/Risc workstation market - about $17bn. In 1995, it was worth about $885m.

This level of growth is attracting Compaq and other leading PC vendors, such as Dell Computer, which have plans to introduce workstations at the cheapest end of the workstation market, which currently spreads from as low as $7,000 to $50,000.

Although the PC vendors can undercut the price of Unix/Risc workstations, the question is whether they can tempt users away from those workstation users.

Traditional workstation users might be able to save money buying NT/Pentium Pro workstations, but are unlikely to make the switch because of their large investments in software and training on Unix/Risc systems. According to Mr Andrew Feit, a senior analyst at Dataquest, market growth will instead come from new users.

"There are many people who want to upgrade their PCs to run more challenging applications such as low-level CAD. Those users would normally have jumped to a Unix/Risc workstation. With NT/Pentium Pro workstations, they will be able to upgrade while still keeping their current applications," said Mr Feit.

The traditional workstation companies are not sitting still. Hewlett-Packard, which held about 20 per cent of the workstation market in 1995, second behind Sun with 36 per cent, will introduce NT/Pentium Pro workstations by the end of August.

"The issue for us was: should we offer customers an NT/Pentium Pro workstation or give the sale to a competitor," said a Hewlett-Packard spokesperson.

IBM and Digital are also expected to introduce NT/Pentium Pro workstations this year. But Sun and Silicon Graphics remain firmly committed to their Unix/Risc workstations.

Sun plans to stick with its Solaris Unix version and its Risc Sparc microprocessor-based workstations. "The impact on Sun will be negligible if at all. We're pure-play Sparc and Solaris, and lead the workstation market. Most at risk will be the second-tier players, like Silicon Graphics," said Mr Gene Banman, vice-president and general manager of Sun's desktop products business division.

Silicon Graphics said it saw no value in producing NT workstations, considering it a commodity market with low profit margins, preferring to produce its own workstations where it can add value and a healthy profit margin.

For the leading PC manufacturers to be successful in the NT/Pentium Pro workstation market it will require not just cheap hardware but selling to new types of customers and nurturing relationships with developers of specialist workstation software.

For companies such as Hewlett-Packard, already established in the workstation market, selling NT workstations will be much easier. For Compaq and Dell, it will need much more effort. But if Dataquest's predictions come true, those efforts should pay off very quickly.

Rolls-Royce plans to lift pay-outs

By Ross Tieman

Rolls-Royce, the aero-engine maker, is set to rebuild dividend pay-outs after recording a strong improvement in underlying interim profits.

Although the company recorded a pre-tax loss of £169m ($262m) during the half to June 30, after provisions for disposal of its steam power generation companies, operating profits from the ongoing business rose by 50 per cent to £96m.

The interim dividend was maintained at 3p. But Sir Ralph Robins, chairman, said "We shall get to the point where we can start restoring the dividend."

Rolls' profit recovery has been held back by provisions of £263m for the sale, joint venture or closure of Parsons Power Generation Systems and International Combustion.

The aerospace group decided to quit construction of big power generation plants five weeks ago, believing it was too small to become a leading player.

Sir Ralph said several expressions of interest had been received from potential buyers.

During the first half, the businesses being sold lost £15m on sales of £387m.

A nine-month overtime ban by Rolls' UK aerospace workers, which ended in May, cut group first-half profits by £15m. The collapse of Fokker, the Dutch plane-maker that fitted Rolls' Tay engine to its 70-100 seat regional jets, cut profits by a further £5m, Sir Ralph said.

But the company, engaged in a three-way battle with Pratt & Whitney and General Electric of the US to be the world's biggest jet engine maker, began to benefit from a recovery in the aviation industry.

The order book rose £500m to £7bn.

Rolls announced yesterday that Kato Group of Egypt has placed 13 firm orders for RB211-535 engines to power Tupolev Tu-204 airliners.

Mr Chris Avery, of Paribas, is predicting full-year profits of £235m, with an unchanged final dividend of 3p. But he expects a 10 per cent dividend rise in 1997, when profits are expected to reach £275m.

T&N looks for a partner

By Tim Burt

T&N, the specialist engineering group, yesterday raised the prospect of a wide-ranging international alliance or possible merger in a drive to become one of the world's leading suppliers of motor components.

The company, which as Turner & Newall was one of Britain's largest suppliers of asbestos, said it wanted to double in size and would explore ways to do so – if it could cap its asbestos-related liabilities.

Sir Colin Hope, chairman, said that by the end of next year T&N could be in a position to "consider consolidating" with another components manufacturer.

He hinted that the company might pursue a merger similar to the £3.2bn ($4.96bn) tie-up between Britain's Lucas Industries and Varity Corporation of the US.

"We would only move on something that promised industrial logic," he added.

But T&N would not contemplate such a deal until it had completed its stalled acquisition of the German pistons manufacturer Kolbenschmidt – the subject of an appeal to the German cartel authorities – and until it could see an end to its asbestos burden.

The shares fell 9p to 135p after it announced a sharp fall in first-half profits and admitted it might have to make a £50m provision to meet US personal injury claims this year.

Ashley Ashwood

Sir Colin Hope, left, with Ian Much, chief executive designate

GEC to meet ABI over Simpson

By William Lewis

General Electric Company is on Monday to meet the Association of British Insurers, the leading institutional shareholder body, in an attempt to resolve the dispute over the remuneration package awarded to Mr George Simpson.

The highly unusual meeting will take place just four days before GEC's annual meeting on September 6. Several investors have said they are considering voting against the appointment of Mr Simpson at the meeting because of their concerns about his package.

Shareholders complain that the targets GEC has to beat before Mr Simpson is able to profit from a proposed phantom share option scheme are not tough enough.

Mr Simpson, who takes over from Lord Weinstock as managing director next month, will receive up to £1m if GEC's share price outperforms the FT-SE 100 index by 10 per cent over the previous six-month period.

The ABI yesterday refused to comment, but a GEC adviser said that the association had asked for the meeting after "its members had inundated it with questions about Mr Simpson's deal".

Cost cuts pay off at Ladbroke

By Scheherazade Daneshkhu

Hilton International and a recovery in betting helped push pre-tax profits at Ladbroke up 7.4 per cent to £64.2m at the halfway stage.

This included an exceptional loss of £8.6m on commercial property sales and the £100m sale of the Langham Hilton in London. Turnover was down 7 per cent at £1.98bn.

Mr Peter George, chief executive, said the results for the first half were "excellent" and attributed the rise in profits to new investment, cost reductions and betting deregulation.

At Hilton International, underlying profits rose 23 per cent to £70m on turnover 5 per cent ahead at £914m. However, pressure on room rates in continental Europe continued to act as a drag. Fixed-lease arrangements in some underperforming hotels pushed up costs and contributed to a 17 per cent fall in profits to £8.7m.

Profits in the betting arm rose 17 per cent to £43.6m, although turnover fell by 4.4 per cent to £1.43bn. Lower overheads and substantial betting on the European Football Championship had helped push up profits.

Profits at Vernons, the pools company, rose to £3.4m (£2.7m), mainly due to reduced costs. Turnover fell sharply to £45m (£67.8m).

Net debt was £1.02bn (£1.15bn), giving gearing of 57 per cent. Property sales since the period end further reduced debt to £875m.

Prices for electricity determined for the purposes of the electricity pooling and settlement arrangements in England and Wales.

1/2 hour period ending	Provisional Price for Trading on 30.08.96: Pool purchase price £/MWh	Final Prices for Trading on [illegible]: Pool purchase price £/MWh	Pool selling price £/MWh
0030	9.11	9.02	9.02
0100	9.00	8.97	8.97
0130	9.00	8.91	8.91
0200	9.01	8.91	8.91
0230	9.01	8.91	8.91
0300	9.01	8.91	8.91
0330	9.00	8.91	8.91
0400	9.00	8.91	8.91
0430	9.00	8.91	8.91
0500	9.00	8.91	8.91
0530	9.05	8.97	8.97
0600	9.05	8.95	8.95
0630	12.50	8.98	8.98
0700	12.60	9.04	9.04
0730	18.10	13.17	14.69
0800	19.60	16.29	17.82
0830	23.88	18.99	20.52
0900	31.85	19.08	20.64
0930	40.86	19.22	20.82
1000	47.54	19.30	20.92
1030	49.80	19.30	20.91
1100	52.09	19.25	20.86
1130	66.86	19.22	20.82
1200	69.17	19.22	20.82
1230	64.06	19.17	20.76
1300	55.18	19.12	20.69
1330	34.36	18.15	19.70
1400	29.31	18.11	19.66
1430	26.31	17.64	19.18
1500	22.25	17.63	19.16
1530	20.83	17.62	19.15
1600	17.55	16.65	18.19
1630	18.17	18.51	20.04
1700	22.04	19.36	20.89
1730	21.21	19.35	20.88
1800	16.48	19.35	20.88
1830	14.05	19.34	20.87
1900	13.14	16.04	17.57
1930	12.92	15.22	16.75
2000	9.42	13.17	14.70
2030	24.04	8.91	10.44
2100	24.08	8.91	10.44
2130	23.83	25.67	27.20
2200	12.67	28.77	30.30
2230	12.57	28.77	30.30
2300	12.80	28.77	30.30
2330	9.05	8.91	10.44
2400	9.05	8.91	10.44

Restructuring programme helps Reckitt

By Christopher Price

Benefits of its disposals and acquisitions programme helped Reckitt & Colman, the household goods and drugs company, increase underlying interim profits 10 per cent to £165m ($256m).

However, the actual pre-tax line fell to £179m compared with £316.4m which was boosted by £166.8m of exceptional gains on disposals which included the UK food subsidiary and its famous mustard business.

Disposals raised £14m this time.

Total turnover was flat at £1.19bn, although sales from continuing operations rose 4 per cent to £1.16bn in the six months to June.

Mr Vernon Sankey, chief executive, said the results bore the first fruits of the company's strategy of turning itself into a focused household goods and over-the-counter drugs supplier.

Following the $1.5bn (£1bn) purchase of L&F Products, the US household goods group, last year, the company's disposal programme had raised a net £432m – above the £400m target a year ahead of schedule.

An improvement in cash generation resulted in an outflow of £15.2m becoming an inflow of £42.8m despite a £23m reorganisation charge.

Net borrowings declined to £433m, representing gearing of 37 per cent (52 per cent).

In Europe, where its leading brands include Lemsip and Dettol, dull trading, particularly in France, kept operating margins pinned to 18 per cent and profits were just 3 per cent higher at £78m.

There was a strong performance from the US, where the benefits of rationalisation of L&F helped profits jump 60 per cent to £53.2m on flat sales of £574m.

Operating margin rose from 10.6 per cent to 14.2 per cent.

Trading in emerging markets was mixed, with operating profits flat at £66m. Brighter conditions in Asia, Brazil and Africa were offset by downturns in Australasia and Mexico.

Earnings per share fell from 68.1p to 29.7p. On an adjusted basis, they rose 12 per cent to 25.7p.

The interim dividend is lifted by 8 per cent to 7.95p.

Reckitt's shares closed up 3p at 684½p in a falling market.

Brendan Corr

Alan Dalby, chairman: first fruits of transformation

Two Wickes directors resign

By Ross Tieman

Two senior managers have resigned from Wickes, the DIY retailer which discovered two months ago that profits had been over-stated by an estimated £30m ($46.5m).

Neither Mr Les Rosenthal, the group trading director, nor Mr Chris Miles, commercial director of Wickes' UK retailing arm, will receive any compensation for loss of office.

The two were suspended from duty on June 27, the day after Mr Henry Sweetbaum, chairman and chief executive, resigned.

Both have since been assisting an inquiry by accountants Price Waterhouse and solicitors Linklaters & Paines into inaccuracies in Wickes' accounts.

News of the departures was conveyed to the 5,000 staff at Wickes 162 stores yesterday in an internal announcement.

It said their departure "follows the instigation of disciplinary proceedings against Mr Rosenthal and Mr Miles resulting from investigations by Linklaters & Paines".

According to the notice, the resignations will take effect on September 30 – around the time the outcome of the inquiry is expected to be announced.

Wickes said the delay would "allow sufficient time for Mr Rosenthal and Mr Miles to co-operate fully with Linklaters & Paines and Price Waterhouse in the final states of their investigations".

Investigations have centred on cash rebates paid by suppliers to Wickes for product promotion or to compensate for the cost of carrying stocks.

Earlier this month Mr Michael von Brentano, the non-executive who took over as chairman, said the problems had arisen "principally as a result of incorrect timing of the recognition of profit in our accounts". The overstatements are believed to go back several years.

Mr Bill Hoskins, who replaced Mr Stuart Stradling as finance director two weeks ago, has already begun to attack the company's costs.

The head office in Mortimer Street, central London, is to close, together with a small office in Bristol which administered Wickes' fleet of company vehicles. Head office functions will be moved to Wickes' operational headquarters at Harrow, Middlesex.

Regent invited to meet Hambros

By George Graham, Banking Correspondent

Hambros, the UK merchant banking group, wrote yesterday to its new shareholder, Regent Pacific, inviting the Hong Kong-based investment group to a meeting.

The invitation sounded a calmer note after the clash that followed the first disclosure of Regent Pacific's 3 per cent stake on Wednesday.

Then, Sir Chips Keswick, Hambros' chief executive, said Mr James Mellon, Regent Pacific's head, had been "gratuitously rude" in describing Hambros' performance as "diabolical".

Hambros is not the first institution to have discovered Regent Pacific as an annoying presence on its shareholder register.

The group was set up in 1991 by Mr Vincent Chan and Mr Mellon, who had left the Thornton fund management group after its takeover by Dresdner Bank.

Regent has specialised in break-up raids on closed-end investment funds through its Undervalued Assets Fund. The group has not escaped criticism for its tactics. Australian fund manager Armstrong Jones reported it to the Australian Securities Commission after a raid on a fund it managed.

Regent first tried for a stock market listing of its own in Hong Kong in 1992 but had to drop its plans. It is now aiming once again for a listing this autumn.

Some institutions are sympathetic to Mr Mellon's view that Hambros has been "an undervalued and undermanaged enterprise".

Hambros' decision last year to restructure its banking activities by cutting corporate lending and building up its advisory and fund management activities was welcomed by investors and analysts as going in the right direction – and echoes the advice proffered this week by Mr Mellon.

But Hambros's two largest shareholders, the Italian banking group San Paolo and the UK insurer Guardian Royal Exchange, are generally regarded as friendly to the management.

RESULTS

		Turnover (£m)		Pre-tax profit (£m)		EPS (p)		Dividends: Current payment (p)	Date of payment	Corresponding dividend	Total for year	Total last year
Amco Φ	6 mths to June 30	74.2	(30.2)	1.71♥	(0.021)	8.7	(0.1)	2	Oct 1	1.5	-	5
Aukasev Φ	6 mths to June 30	0.018	(-)	0.873L	(0.936L)	1.23L	(1.33L)	-	-	-	-	-
Arnotts ‡	6 mths to July 31	23.3	(22.4)	2.4	(1.68)	10.9	(6.1)	3.75	Dec 19	3.25	-	9.5
Bridon	6 mths to June 30	180.8	(165.1)	2.78♠	(3.46)	2.5†	(4.7)	1.72§	Jan 5	1.375	-	4.4
Cairn Energy	6 mths to June 30	16.9	(5.15)	2.51	(8♥)	2.73	(7.72)	-	-	-	-	-
Cakebread Robey	6 mths to June 30	7.73	(9.2)	0.281	(0.329)	4.4	(5.5)	1.25	Oct 18	nil	-	2
Columbus	Yr to Mar 31	2.57	(2.91)	0.172L	(0.382)	0.73L†	(1.51)	nil	-	0.328	nil	0.576
Derby	6 mths to June 30	9.58	(9.19)	0.88♥	(0.407)	2.37	(2.19)	1	Oct 25	0.9	-	2
EFT	6 mths to June 30	13.9	(8.4)	2.4	(2.04)	3.82†	(3.18)	0.725	Oct 31	0.6	-	2.1
Hambro Countrywide	6 mths to June 30	91.1	(73.7)	10.5♥	(5.82L)	2.41	(1.92L)	0.5	Oct 21	nil	-	nil
Irish Continental ‡	6 mths to Apr 30	47	(39.4)	1.94L	(3.17L)	7.4L	(12.6L)	1.8	Oct 25	1.5	-	4.5
Isotron	Yr to June 30	9.7	(8.83)	3.75	(3.29)	20.2	(17.3)	3.78	Nov 8	3.42	5.77	5.25
Keller	6 mths to June 30	115.5	(110.1)	4.8	(4.33)	4.7	(4.4)	1.95§	Oct 31	1.75§	-	5.3§
Ladbroke	6 mths to June 30	1,982	(2,139)	84.2♠	(59.8♥)	3.75	(3.47)	2.4	Dec 2	2.4	-	6
Lopex	6 mths to June 30	57.5	(64.9)	2.48L♠	(0.819)	3.23L	(0.78)	0.3	Oct 4	0.25	-	0.5
Pegasus	6 mths to June 30	3.73	(3.04)	0.511	(0.172♥)	6.5	(1.8)	2	Oct 25	2	-	5
Reckitt & Colman	6 mths to June 29	1,185	(1,185)	179♥	(316.4♥)	29.7	(63.1)	7.95	Jan 7	7.35	-	20.15
Rolls-Royce	6 mths to June 30	1,900	(1,607)	169L♠	(70♥)	12.27L	(4.32)	2	Jan 6	2	-	5
Roskel	6 mths to June 30	33.2	(28.1)	0.843♠	(1.36♥)	1.69	(5.73)	1.3	Nov 29	1.3	-	4.6
Serco	6 mths to June 30	187.6	(150.2)	8.81	(7.35)	8.6	(7.2)	1.7	Oct 18	1.45	-	4.7
Slough Estates	6 mths to June 30	109	(88.6)	37.4♠	(32.8)	6.7	(4.9)	3.25	Oct 11	3.1	-	8.5
Swaleigh	6 mths to June 30	22.5	(20.8)	0.965	(0.458♠)	0.15	(0.06)	nil	-	nil	-	nil
T&N	6 mths to June 30	1,051	(1,089)	58.1♠	(73.2♠)	8.5	(8.3)	3	Nov 15	3	-	6
UK Safety	6 mths to June 30	15.5	(14.3)	0.314♥	(0.049L♠)	0.61	(0.13L)	nil	-	0.8	-	0.8
Visual Action	6 mths to June 30	43.8	(36.8)	3.58	(2.91)	6.28	(5.75)	1.2	Oct 11	-	-	-
Whitecross Φ	6 mths to June 30	1.64	(0.936)	0.005	(0.114L)	0.13	(3L)	-	-	-	-	-

Investment Trusts		NAV (p)		Attributable Earnings (£m)		EPS (p)		Current payment (p)	Date of payment	Corresponding dividend	Total for year	Total last year
British Assets	Yr to Sept 30	-	(-)	-	(-)	-	(-)	1.13875*	Oct 7	1.095	-	4.555
Edinburgh Small	Yr to June 30	122.32	(100.19)	0.245	(0.375)	0.35	(0.54)	0.25	Oct 7	0.25	0.25	0.25
Throgmorton 1000	Yr to June 30	165.6	(131.8☆)	1.07	(0.902)	2.4†	(2.66)	2.25	Oct 16	2.5	2.25	2.5

Earnings shown basic. Dividends shown net. Figures in brackets are for corresponding period. ♠After exceptional charge. ♥After exceptional credit. ‡Irish currency. †On increased capital. §Foreign income dividend. ΦAim stock. ☆Restated. *Third interim: makes 3.4155p to date.

TECHNOLOGY

Virtual adverts become reality

The introduction of technology into the advertising industry has been a piecemeal affair. But the growing popularity of high-speed digital networks is allowing agencies to rethink the way they do business.

John McWilliams, chairman of the McWilliams Partnership, says ISDN links have allowed it to expand its geographical reach, save time and involve clients in the creation of ads. "We are encouraging clients to be part of the creative process."

The agency has ISDN lines linking its clients to its offices in London. It is also linked up to offices in Slough, Leeds, Manchester and Glasgow.

Clients and regional offices can draw on the skills of the 30 staff in London at the touch of a button. That saves travel costs. It also makes recruitment easier, since most of the staff can be based in the heart of the UK's advertising industry.

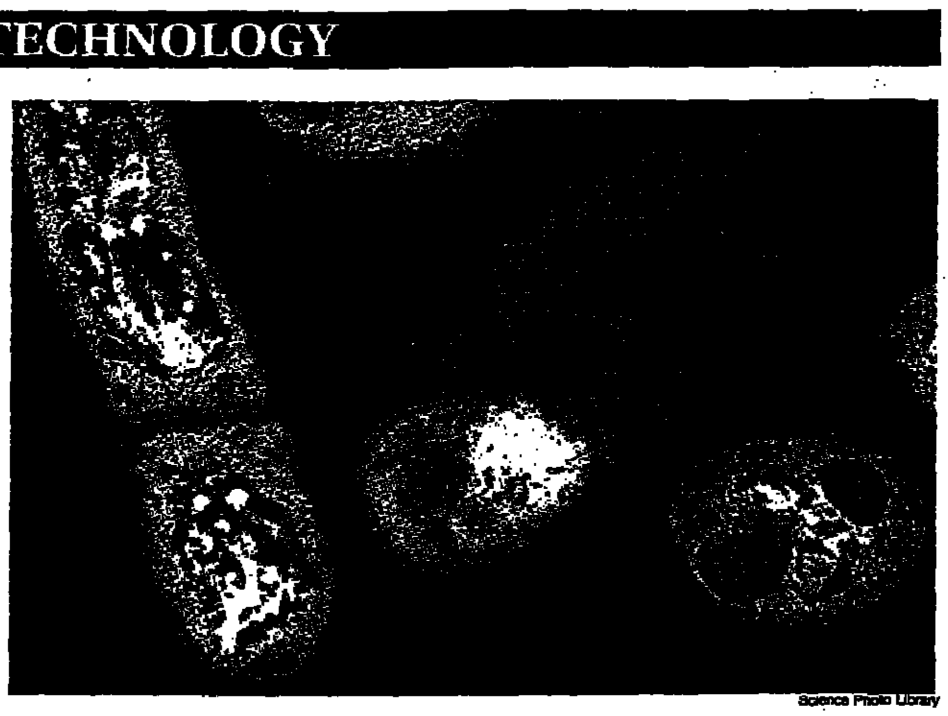
Clients can deal directly with the staff as the ad is created. Both sides use a Power Macintosh connected to an ISDN line. On top of each Mac is a tiny camera focused on the person in front of the screen.

Each camera transmits an image of the person's face to the other user's screen, which also displays the ad they are working on. Using the mouse or a light-pen, they can point to and draw on parts of the ad.

Instead of sending proofs by courier or fax, the client can change, check and approve the full-colour version of the ad in minutes.

"The main advantage is how quickly we can see things and approve them. It can save us a day," says John Palmer, marketing manager at Cellnet, the mobile phone company. "It's new to us, but we are going to use it much more in the future."

Vanessa Houlder



Science Photo Library

Mycobacterium tuberculosis: the bacteria are spread by coughing or sneezing and inhaled

A new diagnostic system could revolutionise tuberculosis detection, says **Jill Graham**

Testing for TB

A British biotechnology company has developed a new laboratory test for tuberculosis which could have a significant effect on diagnosis of the infectious, and often fatal, lung disease.

The new test, developed by Suffolk-based Biotec Laboratories, comes at a time when the need for new TB diagnostics and tests for drug sensitivity – whether a drug will work – has never been greater. Tuberculosis has been declared a "global emergency" by the World Health Organisation – the only condition ever to receive this ignoble award. It mainly occurs in developing countries which have the least resources to tackle such problems.

Accurate diagnosis and drug sensitivity testing is an essential prerequisite for its successful treatment and the prevention of its spread.

These goals are difficult enough to achieve in sophisticated westernised hospitals. But in developing countries – where money and trained personnel are always in short supply – they are impossible.

Tests available for the detection of TB have considerable drawbacks:

● Microscopy – directly visualising the bacteria which cause TB under magnification – is simple and quick but relatively insensitive. Besides, it gives no information about drug sensitivity – a vital factor with the emergence of resistant strains of TB.

● Culture – growing the bacteria in the laboratory – is more sensitive and can be used to test drug sensitivity. But it is slow, and can take six weeks. Becton Dickinson's Bactec system can reduce this time but relies on expensive equipment.

Biotec has been supplying developing countries with diagnostic materials for 15 years, giving it a clear understanding of overseas medical problems and laboratory practices.

"There is an urgent need for a rapid, sensitive and affordable test for diagnosis and the identification of drug resistance," says Roderick Roy, Biotec's managing director.

In 1993 Biotec's microbiologist Bill Hyde started working on improved TB detection techniques. He noticed that ideas developed by Stuart Wilson, then at the London School of Hygiene and Tropical Medicine and now at the Mycobacteria Research Unit of the Public Health Laboratory Service at Dulwich, were almost identical to work by Gordon Stewart, professor in applied molecular biology at Nottingham University.

The BioPhAB test is the culmination of the two scientists' ideas. It is a simple microbiological assay which can be performed by relatively unskilled personnel.

The method is highly sensitive and a TB detection diagnosis can be made within 10 hours. Drug susceptibility testing will take two to three days.

Biotec was recently awarded a £45,000 Smart award from the Department of Trade and Industry for feasibility studies. These will be carried at Biotec's Suffolk laboratories, at the London School of Hygiene and Tropical Medicine and in remote areas of the third world.

The WHO will be involved in clinical studies of the test. Under the terms of a memorandum of understanding the WHO will use its laboratories in Africa and Asia to help carry out field trials. In return Biotec will supply the test to the WHO at preferential prices. If feasibility studies are successful Biotec will apply for a DTI Spur award to bring the product to the market.

BioPhAB is likely to be popular in the developed world and developing worlds since it will be cheaper and quicker than alternative tests and the reagents used cost little more than a conventional culture.

"The potential market is frighteningly large," says Roy. "No one knows exactly how many tests are done at present but it is very likely we would have to scale up production to meet demand."

A second article on new TB treatments will appear shortly.

How BioPhAB kit will work

- The patient's sputum is mixed with BioPhAB which contains a bacteriophage (a virus which specifically attacks the TB bacterium.) If TB bacteria are present the virus infects the cell and moves inside it.
- The specimen is then incubated and treated with a special reagent which kills any virus which is not protected by bacteria – so all the virus will be killed if there is no TB present.
- The specimen is then incubated again to allow the virus to reproduce. These then lyse, or break, the cell wall.
- Any virus is then easily detected by the formation of plaques (patches) on the culture dish. The number of plaques will give an accurate indication of the number of bacteria in the sample.
- Where samples are pre-treated with selected drugs, the susceptibility of the patient's strain of TB to those drugs can be detected.

The test has the advantage of killing the potentially dangerous TB bacteria during the process of the test.

MANAGEMENT

John Kay

Of fortunes and foresight

Competing for the Future by Gary Hamel and CK Prahalad, has been one of the best-selling business books of the last two years. They argue that changes in technology and the growth of international competition have eroded the traditional boundaries between markets and industries. The companies that survive into the next century will be those that first perceive these changes and act accordingly.

It is easy to understand why this thesis is seductive. The claim that the only constraints to our success are the limits of our imagination has lifted hearts for centuries. Grand visions take precedence over the pedantry of the numbers men. Since the argument makes acquisitions and alliances central items on every company's agenda, an army of advisers is waiting to applaud and assist.

So SmithKline Beecham is redefining pharmaceuticals as the healthcare business. Scottish Power knows that the future lies with multi-utilities. All kinds of media companies are exploring their versions of convergence.

Hamel and Prahalad assert that future business success will be based largely on early identification of the changes in the boundaries of markets and industries.

"Some management teams were simply more 'foresightful' than others. Some were capable of imagining products, services, and entire industries that did not yet exist and then giving them birth." But there are good reasons for scepticism about the degree to which such foresight is the basis of competitive advantage.

AT&T correctly predicted the convergence of computing and communications, but was mistaken in believing that this should be the basis of its business organisation. Xerox demonstrated foresight in recognising that the personal computer and the fax machine would be important new products in the 1980s, but failed to make money out of either innovation.

So what evidence do Hamel and Prahalad present for their claims? As is often the case with business fashions, the main evidence for the potency of the drug is the number and prestige of the other patients who are taking it. Hamel and Prahalad identify several companies which have prospered by "reinventing their industry".

British Airways seeks to become the world's first truly global airline. Bell Atlantic has a vision of an integrated information communications company.

But it may be premature to claim success for these "reinventions". Bell Atlantic's diversification has been sidelined in favour of just becoming a bigger phone company by merging with Nynex. British Airways, nursing heavy losses on its investment in US Air and Qantas, now seeks to double its bets through an alliance with American Airlines.

One might conclude, therefore, that the success of these companies' strategies may not be the result of their foresight. Other companies on Hamel and Prahalad's list do not seem to have much to do with their argument either. Wal-Mart and Hewlett-Packard are undeniably successful companies, but their success is based on doing similar things to their competitors, only better.

Anticipating the evolution of markets and industries is hard, and even if a company chooses the right direction, getting the timing right is much more difficult

It is easier to find examples of companies which have tried but failed at great cost, to redefine their industry than ones which succeeded in obtaining a sustainable competitive advantage. Citibank's unsuccessful strategy of establishing Pan-European retail banking; the attempt through the Allegis Corporation to integrate United Airlines into a "total travel experience"; Saatchi and Saatchi's creation of a global advertising business.

Anticipating the evolution of markets and industries is hard, and even if a company chooses the right direction, getting the timing right is difficult.

Citibank and Saatchi were wrong in the 1980s, but one day they will probably be right. The advantages of being first rarely outweigh the risks of being wrong, or simply premature. It is not the people who pioneered jet aircraft or pocket calculators, superstores or personal computers, video recorders or junk-bond financing, package holidays or fax machines, who are market leaders today. Genuine foresight was rapidly overtaken by other companies. Boeing and Casio, Sainsbury and IBM, Matsushita and Salomon, Thomson and Canon had real competitive advantages based on what is the only sustainable source of competitive advantage – a distinctive capability unmatched and unmatchable by rivals.

مكتبة من الاصل

RECRUITMENT

Robert Taylor looks at strategies for reducing physical assaults on employees

Firm response to violence at work

Violence in the workplace is an issue that is beginning to arouse deep and widespread concern among employees in the world's industrialised countries. As labour markets become more deregulated and flexible under competitive pressures social stresses have increased. Factories and offices may not be battlegrounds but violence and threats of physical assault involving employees are on the increase.

The most common are attacks by non-employees against workers. Today's 24-hour stoppage by staff employed in Britain's state-run Benefits Agency reflects this anxiety. The protest is against the government's refusal to allow protective screens in open-plan Jobcentres to administer the new Jobseeker's Allowance which will replace unemployment benefit next month. Some of the agency's staff fear desperate clients in search of work will react aggressively to what they will see as a more coercive approach with a lower level of benefits.

While the UK labour market is seen by its enthusiasts as highly adaptable to the ever-changing needs of employers and employees alike, there is evident unease about job insecurity, particularly among unskilled, untrained young men. This must give pause for thought about how some of them will react to the introduction of a tougher welfare-to-work regime in the employment services which is promised by both the government and the Labour party.

Perhaps there are lessons to learn from the handling of workplace violence in the US, where several massacres of employees have hit the headlines in the 1990s. In 1991 Thomas McIlvane, a sacked US postal service letter carrier in Royal Oak, Michigan, murdered four colleagues and wounded four others with a rifle.

Two years later eight people were gunned down in Pettit and Martin, a San Francisco law firm. Only a fortnight ago a student at San Diego State University, 10 miles from the Republican Convention, murdered three professors who were examining him on his thesis.

These were unfortunately not isolated incidents. The US Society for Human Resource Management pointed out recently that nearly half of human resource professionals reported one or more violent incidents in their workplaces since January 1 1994.

Forty per cent of respondents mentioned threats of violence by employees, 22 per cent reported pushing or shoving and 13 per cent fistfights. Men committed 77 per cent of the incidents – and provided 53 per cent of the victims.

Only 1 per cent of the incidents involved shootings, rapes, sexual assaults or stabbings. "It is true fatalities are still relatively rare as a result of workplace violence," says Ms Tia Schneider Denenberg from Workplace Solutions. This is a new organisation formed with support from Cornell University and the William and Flora Hewlett Foundation which is designed to help companies devise violence prevention programmes.

She adds: They are the tip of the iceberg. In many workplaces resentment and aggression routinely displace co-operation and communication, Hostility surfaces as threats, intimidation, harassment, talking and sub-lethal assault."

Today's changing workplace is seen as the particular focus for employee aggression in the US. New forms of teamworking as well as mandatory overtime, more shift-working and fatiguing production targets are blamed for the intensification of pressure on employees already under stress.

Moreover, as Ms Denenberg points out, American workers are more vulnerable than their colleagues in the UK and in European social market economies because they lack welfare state protection.

Other causes of workplace violence include authoritarian management styles, family breakdown and drug and alcohol abuse. The use of electronic surveillance and computerised monitoring by companies of their employee's individual performances can also add to a sense of angst.

As in the UK, workplace violence in the US is particularly apparent by customers against service workers, with the most vulnerable being those employed in healthcare and social work. A 1994 US study found nearly two-thirds of non-fatal assaults against staff took place in nursing homes, hospitals and residential care centres.

The federal government's Occupational Safety and Health Administration (Osha) has recently published voluntary guidelines to assist vulnerable workers on how to prepare to deal with such violence which have wider application. Workplace Solutions is also developing a strategy for managements and employees designed to stimulate awareness of the problem and suggesting ways to prevent it.

"We have to make organisations crisis-prepared, not crisis-prone," says Mr Mark Braverman from Crisis Management Group, which designs and implements violence prevention strategies. What seems to be vital is to combine a management commitment to a violence prevention programme with active worker involvement in implementing it.

"Preparing employees to handle violent incidents should be as commonplace as fire drills in workplaces," says Ms Denenberg of Workplace Solutions. Companies are encouraged to create organisational risk audits as well as grievance and dispute resolution procedures and training programmes.

The Ohsa guide emphasises the need for a written code of prevention as well as the introduction of staff screening surveys, workplace security and evaluation analyses and safety devices in the workplace to make employees secure.

Treating workplace violence as another occupational safety and health hazard is likely to be more successful – the American experience suggests – if employees, management and trade unions work together. The creation of joint company labour-management committees are being encouraged to take the initiative.

But employers and workers have a long way to go in recognising and responding to the dangers of workplace violence. A recent survey by the American Management Association found 65 per cent of companies have no policies to deal with actual or potential violence inside or outside their workplaces. Most see the best answer to such problems as firing difficult individuals or imposing disciplinary procedures without co-operation.

Clearly there is a danger in the adoption by employers of over-intrusive methods. "Workplace violence should not become an excuse for witch-hunting," warns Mr Braverman. Preventative measures must be administered with sensitivity and understanding.

Yet as those who grapple with the growing workplace violence problem recognise, the US has an unenviable reputation as a "gunfighter nation" that goes back to its origins. Any comprehensive strategy would involve going far beyond the workplace to introduce measures to reduce and contain the violence that is endemic in American society – and there are precious few signs of that happening.

IT Appointments

INTERNATIONAL CAPITAL MARKETS

Growth data surprise drives down Treasuries

By Lisa Bransten in New York and Samer Iskandar in London

A surprisingly strong figure on US economic growth in the second quarter sent Treasury prices sharply lower in early trading yesterday. The yield on the benchmark 30-year Treasury rose above 7 per cent for the first time since late July.

Near midday, the benchmark 30-year Treasury was off 22/32 at 96¾ to yield 7.016 per cent, while at the short end of the maturity spectrum the two-year note was ⅛ lower at 99 21/32, yielding 6.210 per cent. The September 30-year bond future fell ¾ to 108⅜.

Traders were caught off guard by a large upward revision in the estimate of second-quarter gross domestic product growth. Originally reported as 4.2 per cent, the Commerce department said yesterday that growth was 4.8 per cent last quarter. Generally, such revisions are small and economists had forecast that GDP growth would not change from the earlier estimate.

Bonds were also troubled by a 7.9 per cent jump in new home sales, where most analysts had forecast a modest decline.

The strong data renew fears that the Federal Reserve could raise interest rates as early as next month. Many on Wall Street began to bet against an early rate increase after weak employment figures were released at the beginning of this month.

Mr Kevin Sluder, a senior fixed-income trader at First Chicago Securities, said yesterday's strong data added importance to the jobs figures due out at the end of next week. "If we get a good solid jobs number, then people might start putting [a September rate increase] back on the table."

Today's release of figures on factory orders will also be carefully watched by investors for hints of inflationary pressures.

GOVERNMENT BONDS

■ European bonds initially dipped in the wake of falling Treasuries, but later recovered to close slightly higher.

French bonds proved resilient, despite renewed pressure on the franc from looming social unrest. Official confirmation that the social security deficit would reach FFr50bn–FFr55bn by year-end, against an initial government forecast of around FFr17bn, did little to support the market. However, traders reported intervention by the central bank as soon as the franc threatened to fall below FFr3.43 against the D-Mark.

The Matif's September notional future settled at 123.10, up 0.14, while in the cash market the 10-year yield spread over bunds closed unchanged at 6 basis points.

Although the threat of strikes by public sector unions is likely to continue to weigh on the French market, analysts cited two supporting factors for the franc and OATs.

The first is that speculation against the currency has so far been with thin volumes. "This suggests that the Banque de France could be quite successful in stopping the slide going too far," said economists at Bear Stearns in London.

The second is what some described as the absence of agreement among the unions, which could undermine the effects of protests planned next month. "They [the unions] are not yet sure whether they want to act in concert or separately," said one independent observer. "Some of them are not even sure they want to participate in any demonstrations."

■ Spanish bonds outperformed other markets, on signs that the Catalans have agreed with the government on the thrust of the forthcoming budget. The September future on 10-year bonds rose 0.35 to close at 101.00. In the cash market, the 10-year yield spread over bunds tightened by 5 basis points to 246.

Bonds were also supported by the peseta's recovery on the foreign exchange market, as the D-Mark weakened against the dollar and other European currencies.

Regent Ukraine Fund launched

By Richard Lapper

Regent Pacific, the Hong Kong-based fund management group, is poised to launch another investment trust dedicated to the emerging markets of the former Soviet Union.

Mr Jim Mellon, chairman of Regent, said the group hoped to raise $30m–$50m to invest in Ukrainian equities. It aimed to launch the Regent Ukraine Fund by the end of the year.

Regent manages four investment trusts with a total of some $345m invested in the region's equity markets. A fifth fund, which has invested a further $105m in Russian debt markets, was launched this summer.

The White, Red, and Blue Tiger funds were oriented towards the stocks of the former Soviet Far East, central Asian and Baltic states, respectively, while the Yellow Tiger Fund invests in Russian stocks but is targeted at investors in South Korea. In practice, however, all the funds have invested heavily in Russian blue chip companies. The funds, launched since September 1994, have shown returns of between 50 and 150 per cent.

Mr Mellon said the capitalisation of the Ukrainian market was modest, at about $1bn. However, there was growth potential, given the introduction of tighter monetary policy and the expected completion by year-end of an ambitious privatisation programme. Only four companies are listed on the country's stock exchange, with another 100 or so traded over the counter.

Retail investors offered wide variety of issues

By Conner Middelmann

The eurobond market saw a flurry of new issues in a wide variety of currencies yesterday, but most offerings were of moderate size and targeted mainly at retail investors.

In the sterling sector, Crédit Local de France issued £100m of five-year bonds aimed at European retail investors. The bonds were priced to yield 17 basis points over gilts, a "concessional price" to attract investors who are cautious towards French financial institutions, lead manager NatWest Markets said. Nonetheless, the deal was slow to get off the ground and the spread widened to 20 basis points.

Another sterling issue surfaced for CSW Investments, the holding company of Seeboard, the south-eastern UK electricity distributor. It launched £100m of 10-year bonds yielding 85 basis points over gilts.

The proceeds of the deal, like those raised though a recent $400m yankee bond issue, will be used to refinance a £1.1bn loan CSW took out to buy Seeboard early this year. CSW Investments is the UK arm of Texas-based Central & South West Corp.

INTERNATIONAL BONDS

Since the bonds are being issued by a holding company rather than the utility itself, they have a weaker credit rating, which was reflected in the generous yield spread. Bonds issued by higher-rated utilities trade in the 50s and 60s over gilts, dealers said. According to BZW, joint lead with SBC Warburg, the deal saw strong UK institutional demand and was fully placed.

The Canadian dollar sector saw more supply, fuelled by investors' appetite for current-coupon bonds trading close to par, and retail demand amid continuing heavy redemptions. An estimated C$3.6bn of bonds is maturing in August and September.

Eurofima, the Basle-based supranational agency that lends to Europe's railway systems, issued C$100m of six-year bonds – almost a carbon copy of a recent World Bank deal. While retail investors do not usually like such long maturities, they have been moving down the yield curve to pick up yield over US Treasuries, said lead manager CIBC Wood Gundy.

Canadian short yields currently stand well below those in the US, while the longer end still offers a yield pick-up. The bonds were priced to yield 5 basis points over the benchmark Canadian government bond.

The Kingdom of Sweden, a regular borrower in the Canadian dollar sector, also issued C$100m of bonds, due in December 2002, priced to yield 21 basis points over Canadian government bonds, via Toronto Dominion Bank.

Commerzbank also took advantage of retail investors' return from their summer holiday by launching a A$100m three-year offering via Commerzbank and Hambros. And in the D-Mark sector, CNCP-NKBK International Finance, a Belgian commercial bank, issued DM250m of floating-rate notes, benefiting from the relative scarcity of higher-yielding floating-rate paper.

New international bond issues

Borrower	Amount m.	Coupon %	Price	Maturity	Fees %	Spread bp	Book-runner
■ US DOLLARS							
Spintab(a)‡	100	(a1)	100.054	May 1998	0.10	-	Lehman Brothers Intl
■ D-MARKS							
CNCP-NKBK Intl Finance‡	250	(b)	99.75R	Sep 2001	0.20R	-	B de Zoete Wedd(Deutsch)
■ SWISS FRANCS							
SNCF	300	4.50	102.90	Oct 2006	2.75	-	ABN Amro/Credit Suisse
■ STERLING							
CSW Investments(c)	100	8.875	99.814R	Sep 2006	0.45R	+85(7½%-06)	BZW/SBC Warburg
Crédit Local de France(s)	100	7.375	99.502R	Dec 2001	0.25R	+17(7%-01)	NatWest Capital Markets
■ LUXEMBOURG FRANCS							
CCBP(f)	2bn	6.125	102.85	Dec 2002	1.875	-	BCEE/BIL
■ CANADIAN DOLLARS							
Kingdom of Sweden(f)	100	6.875	99.80R	Dec 2002	0.275R	+21(7%-01)	Toronto Dominion Bank
Eurofima	100	6.75	99.90R	Sep 2002	0.275R	+5(7%-01)	CIBC Wood Gundy
■ AUSTRALIAN DOLLARS							
Commerzbank	100	7.25	101.175	Oct 1999	1.50	-	Hambros Bank
■ ECU							
Abbey Natl Trsy Services	55	(d)	101.50	Oct 2004	2.00	-	Kredietbank Intl Group
■ DANISH KRONER							
European Investment Bank(f)	600	7.00	101.71	Dec 2004	1.875	-	Den Danske/Générale

Final terms, non-callable unless stated. Yield spread (over relevant government bond) at launch supplied by lead manager. ★Unlisted. ‡ Floating-rate note. R: fixed re-offer price; fees shown at re-offer level. a) Short last coupon. a1) 3-mth Libor flat. b) 3-mth Libor +15bp. c) Issuer is a unit of Seeboard. Spens call provision. 51% ownership put option. Standard utility put option. d) 5¾% to 15/10/00, then 8%. f) Long 1st coupon. s) Short 1st coupon.

Salomon warrants deal biggest ever

By Conner Middelmann

Salomon Brothers has launched what is thought to be the largest ever programme of warrants on equity indices, representing 92 per cent of global equity markets' capitalisation.

It is the first programme which allows investors to buy and exercise the instruments in three different currencies: US dollars, Swiss francs and D-Marks.

"The idea is to create a global family of warrants enabling investors to gain exposure to as many markets as they want in the most convenient way," said one market observer.

The programme includes 66 individual warrants on 28 equity indices in 24 countries in the Americas, Asia and Europe. The market capitalisation covered by the programme is $15.6bn. Call and put warrants are available on all indices except Indonesia and the Philippines, where only call warrants are available.

The expiry dates are December 3 1997 for the American and Asian warrants and December 10 1997 for the European ones. The options are to be issued by Salomon Brothers' German subsidiary and listed on the Frankfurt, Düsseldorf and Stuttgart stock exchanges.

The exercise style is American and the pricing format is in local currency except for the Latin American markets, which are in a US dollar ADR format.

WORLD BOND PRICES

BENCHMARK GOVERNMENT BONDS

		Coupon	Red Date	Price	Day's change	Yield	Week ago	Month ago
Australia		6.750	11/06	90.6720	-0.260	8.11	7.91	8.52
Austria		6.250	05/06	98.4400	-0.070	6.36	6.31	6.45
Belgium		7.000	05/06	102.6900	+0.020	6.61	6.57	6.74
Canada *		7.000	12/06	97.1800	-0.410	7.40	7.29	7.62
Denmark		8.000	03/06	104.3600	-0.060	7.34	7.23	7.29
France	BTAN	5.500	10/01	99.5070	+0.130	5.61	5.51	5.42
	OAT	7.250	04/06	105.7100	+0.050	6.43	6.32	6.40
Germany Bund		6.250	04/06	99.1200	-	6.37	6.30	6.40
Ireland		8.000	08/06	102.5400	-0.060	7.62	7.56	7.59
Italy		9.500	02/06	100.9200	+0.220	9.35†	9.33	9.23
Japan	No 140	6.600	06/01	120.8168	+0.310	1.87	2.08	2.38
	No 182	3.000	09/05	100.1424	+0.280	2.98	3.12	3.39
Netherlands		8.500	06/06	115.4000	+0.070	6.33	6.27	6.36
Portugal		11.875	02/05	118.9100	-0.090	8.62	8.68	8.67
Spain		8.800	04/06	99.6300	+0.320	8.83	8.79	8.70
Sweden		6.000	02/05	87.2469	+0.080	8.14	7.99	8.27
UK Gilts		8.000	12/00	103-17	+1/32	7.02	6.95	7.14
		7.500	12/06	97-13	+2/32	7.87	7.79	7.89
		9.000	10/08	107-24	+3/32	7.99	7.93	8.01
US Treasury *		7.000	07/06	101-05	-16/32	6.82	6.60	6.75
		6.750	08/26	98-19	-22/32	7.02	6.85	6.95
ECU (French Govt)		7.500	04/05	104.2700	+0.150	6.82	6.73	6.84

London closing, *New York mid-day. Yields: Local market standard.
† Gross (including withholding tax at 12.5 per cent payable by nonresidents)
Prices: US, UK in 32nds, others in decimal. Source: MMS International

US INTEREST RATES

Latest		Treasury Bills and Bond Yields			
		One month	-	Two year	6.23
Prime rate	8¼	Two month	-	Three year	6.41
Broker loan rate	7	Three month	5.25	Five year	6.61
Fed funds	5⅜	Six month	5.39	10-year	6.84
Fed funds at intervention	-	One year	5.79	30-year	7.03

BOND FUTURES AND OPTIONS

France

■ NOTIONAL FRENCH BOND FUTURES (MATIF) FFr500,000

	Open	Sett price	Change	High	Low	Est. vol.	Open int.
Sep	123.02	123.10	+0.14	123.30	122.94	148,493	179,525
Dec	121.60	121.72	+0.10	121.94	121.64	34,562	46,096
Mar	121.56	121.62	+0.10	121.72	121.56	732	11,027

■ LONG TERM FRENCH BOND OPTIONS (MATIF)

Strike Price	CALLS Sep	Oct	Dec	PUTS Sep	Oct	Dec
120	3.10	-	-	-	0.18	0.61
121	-	1.10	-	-	0.40	0.90
122	1.10	0.50	1.05	-	0.80	1.31
123	0.10	0.17	0.60	-	-	-
124	-	0.05	0.32	0.90	-	-

Est. vol. total, Calls 14,958 Puts 17,008. Previous day's open int., Calls 148,763 Puts 161,891

Germany

■ NOTIONAL GERMAN BUND FUTURES (LIFFE)* DM250,000 100ths of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Sep	97.40	97.38	+0.04	97.55	97.35	151309	161249
Dec	96.44	96.44	+0.04	96.60	96.42	34477	82932

■ BUND FUTURES OPTIONS (LIFFE) DM250,000 points of 100%

Strike Price	CALLS Oct	Nov	Dec	Mar	PUTS Oct	Nov	Dec	Mar
9600	0.73	0.99	1.20	1.11	0.29	0.55	0.76	1.62
9650	0.44	0.71	0.91	0.88	0.50	0.77	0.97	1.90
9700	0.23	0.46	0.68	0.70	0.79	1.04	1.24	2.21

Est. vol. total, Calls 8195 Puts 6358. Previous day's open int., Calls 98717 Puts 99651

Italy

■ NOTIONAL ITALIAN GOVT. BOND (BTP) FUTURES (LIFFE)* Lira 200m 100ths of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Sep	115.25	115.58	+0.26	115.70	115.12	35891	47555
Dec	114.49	114.88	+0.27	114.94	114.40	4085	15571

■ ITALIAN GOVT. BOND (BTP) FUTURES OPTIONS (LIFFE) Lira200m 100ths of 100%

Strike Price	CALLS Dec	Mar	PUTS Dec	Mar
11450	1.88	2.29	1.50	2.41
11500	1.59	2.06	1.71	2.68
11550	1.33	1.84	1.95	2.96

Est. vol. total, Calls 5006 Puts 9762. Previous day's open int., Calls 46553 Puts 64633

Spain

■ NOTIONAL SPANISH BOND FUTURES (MEFF)

	Open	Sett price	Change	High	Low	Est. vol.	Open int.
Sep	100.65	101.00	+0.35	101.02	100.54	56,388	53,356
Dec	100.03	100.40	+0.30	100.47	100.03	898	8,630

UK

■ NOTIONAL UK GILT FUTURES (LIFFE)* £50,000 32nds of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Sep	107-08	107-10	+0-04	107-13	107-04	42908	86151
Dec	106-19	106-20	+0-03	106-23	106-15	11795	75957

■ LONG GILT FUTURES OPTIONS (LIFFE) £50,000 64ths of 100%

Strike Price	CALLS Oct	Nov	Dec	Mar	PUTS Oct	Nov	Dec	Mar
106	1-05	1-27	1-47	2-02	0-29	0-51	1-07	2-02
107	0-34	0-57	1-13	1-37	0-58	1-17	1-37	2-37
108	0-13	0-33	0-50	1-13	1-37	1-57	2-10	3-13

Est. vol. total, Calls 1061 Puts 1100. Previous day's open int., Calls 13339 Puts 12819

Ecu

■ ECU BOND FUTURES (MATIF) ECU100,000

	Open	Sett price	Change	High	Low	Est. vol.	Open int.
Sep	91.72	91.92	+0.16	92.00	91.72	2,266	7,130
Dec	90.10	90.10	+0.16	90.10	90.10	30	1,580

US

■ US TREASURY BOND FUTURES (CBT) $100,000 32nds of 100%

	Open	Latest	Change	High	Low	Est. vol.	Open int.
Sep	108-26	108-17	-0-08	109-02	108-12	176,383	291,892
Dec	108-10	108-01	-0-08	108-17	107-28	43,621	149,639
Mar	107-20	107-20	-0-07	107-20	107-18	593	8,123

Japan

■ NOTIONAL LONG TERM JAPANESE GOVT. BOND FUTURES (LIFFE) Y100m 100ths of 100%

	Open	Close	Change	High	Low	Est. vol	Open int.
Sep	122.26			122.23	122.15	1112	n/a
Dec	120.75			120.73	120.57	2816	n/a

* LIFFE futures also traded on APT. All Open interest figs. are for previous day.

FT-ACTUARIES FIXED INTEREST INDICES

Price Indices UK Gilts	Thu Aug 29	Day's change %	Wed Aug 28	Accrued interest	xd adj. ytd		Low coupon yield Aug 29	Aug 28	Yr. ago	Medium coupon yield Aug 29	Aug 28	Yr. ago	High coupon yield Aug 29	Aug 28	Yr. ago
1 Up to 5 years (22)	121.71	0.04	121.66	2.02	6.91	5 yrs	7.15	7.16	7.69	7.23	7.25	7.71	7.28	7.30	7.79
2 5-15 years (20)	147.53	0.13	147.72	2.63	7.20	15 yrs	8.11	8.14	8.18	8.12	8.14	8.21	8.12	8.16	8.31
3 Over 15 years (8)	160.59	0.25	160.17	2.50	8.73	20 yrs	8.22	8.25	8.20	8.21	8.23	8.23	8.21	8.26	8.32
4 Irredeemables (6)	185.09	0.89	183.46	3.61	7.36	Irred.†	8.24	8.32	8.31						
5 All stocks (56)	142.16	0.13	142.15	2.42	7.44										

Index-linked	Thu Aug 29	Day's change %	Wed Aug 28	Accrued interest	xd adj. ytd		Inflation 5% Aug 29	Aug 28	Yr. ago	Inflation 10% Aug 29	Aug 28	Yr. ago
6 Up to 5 years (1)	200.05	0.01	200.04	3.05	4.43	Up to 5 yrs	2.10	2.09	2.83	0.44	0.42	1.03
7 Over 5 years (11)	188.62	-0.16	188.93	1.08	3.43	Over 5 yrs	3.70	3.69	3.56	3.49	3.47	3.37
8 All stocks (12)	188.75	-0.16	189.05	1.12	3.44							

Average gross redemption yields are shown above. Coupon Bands: Low: 0%-7¾%; Medium: 8%-10¾%; High: 11% and over. † Flat yield. ytd Year to date.

FT FIXED INTEREST INDICES

	Aug 29	Aug 28	Aug 27	Aug 23	Aug 22	Yr ago	High*	Low*
Govt. Secs. (UK)	92.83	92.79	92.81	93.07	93.28	93.19	96.34	91.59
Fixed Interest	113.38	113.34	113.51	113.59	113.84	111.97	115.23	110.74

* for 1996. Government Securities high since compilation: 127.4 (09/01/35), low 49.18 (03/01/75). Fixed Interest high since compilation: 133.87 (21/01/94), low 50.53 (03/01/75). Basis 100: Government Securities 15/10/26 and Fixed Interest 1928. SE activity indices rebased 1974.

GILT EDGED ACTIVITY INDICES

	Aug 28	Aug 27	Aug 23	Aug 22	Aug 21
Gilt Edged bargains	109.5	73.7	77.6	78.4	90.1
5-day average	85.9	79.7	79.8	79.2	77.9

FT/ISMA INTERNATIONAL BOND SERVICE

Listed are the latest international bonds for which there is an adequate secondary market. Latest prices at 7:10 pm on August 29

	Issued	Bid	Offer	Chg	Yield
U.S. DOLLAR STRAIGHTS					
Abbey Natl Treasury 6½ 03	1000	97	97⅜	-⅛	7.07
ABN Amro Bank 7¼ 05	1000	99⅛	99⅜	-⅛	7.52
African Dev Bk 7⅜ 23	500	95¼	95¾	-½	7.80
Alberta Province 7⅝ 98	1000	102¼	102½	-⅛	6.47
Sweden 8 97	2500	105	105¼		3.59
United Kingdom 7¼ 97	5500	104⅛	104⅛		3.43
Volkswagen Intl Fin 7 03	1000	104⅛	104⅜	+⅛	6.22
World Bank 0 15	2000	31¼	31⅝	-⅛	6.21
World Bank 5⅞ 03	3000	99¼	99⅞	+⅛	5.91
Abbey Natl Treasury 8 03 £	1000	100⅞	101⅛		7.81
British Land 8⅞ 23 £	150	90⅝	90⅞	+⅛	10.12
Denmark 6¾ 98 £	800	100½	100⅝		6.47
Depfa Finance 7⅛ 03 £	500	95⅞	96⅛	+⅛	7.89
EIB 8 03 £	1000	101⅞	102	+⅛	7.63

[illegible]

UK GILTS PRICES

[illegible]

Ukraine ... launched

Salomon warrant ... biggest ever?

شكرا من الاهل

CURRENCIES AND MONEY

MARKETS REPORT

Market profits from central bank intervention

By Richard Adams

The French franc touched a five-month low against the D-Mark on Europe's foreign exchange markets yesterday, before rumours of intervention by the Bank of France triggered a retreat.

Although the franc eventually finished just one tick down against the D-Mark, closing in London at DM3.426 from the previous closing price of DM3.425, it lost more ground to sterling and a buoyant US dollar.

The dollar closed worth FFr5.071, up from FFr5.058, while the pound was up to FFr7.897, from FFr7.885.

A higher than expected revision to the US second quarter gross domestic product figures boosted the dollar against the D-Mark to DM1.4802 from DM1.4760. Against the pound the dollar strengthened to $1.557 from $1.559.

The upward march of the Swiss franc was halted, at least temporarily. The D-Mark rose to SFr0.809, marginally up from SFr0.807.

The Swedish kroner rebounded against the D-Mark after its losses earlier in the week. That followed speculation over Sweden's membership of European monetary union (Emu). The kroner finished at SKr4.473 against the D-Mark, up from SKr4.474.

■ Analysts once again cited concerns over France's membership of Emu as the source of its continuing weakness.

The possibility of political unrest next month, following the tough budget cuts needed for the French government to meet the Maastricht treaty criteria for Emu, leaves many market participants predicting further slippage.

Traders said the Bank of France may have intervened after the franc slid to a five-month low of FFr3.4296 to the D-Mark in intra-day trading in Europe. The French central bank was said to have sold D-Marks at FFr3.4295, allowing markets to take profits.

If today's unemployment figures reach a record high, as some observers expect, the franc is likely to weaken.

■ The US dollar rose after a surprisingly strong revision to the second quarter GDP figures. The new level of 4.8 per cent annual growth came after forecasts of no change to the 4.2 per cent estimate.

One London trader said all the evidence was for growth to continue for the rest of the year. He pointed out that the markets have been slow to react to the US economy's strength.

The data suggests the US Federal Reserve may be forced to raise interest rates.

The US Commerce department said the stronger growth was helped by a fall in the import estimates. The revised figure for import growth was 9.4 per cent in the second quarter, rather than the earlier 12.9 per cent growth.

There has been little sign yet of a slowdown in the economy during the third quarter, and few signs in the GDP report that consumer price inflation is accelerating.

Some analysts, however, are more worried about wage costs. The department estimates that the current trend in the unemployment rate is for a fall to 5 per cent by the year's end, from its current 5.5 per cent level.

■ The Swedish kroner regained some of the ground it lost after comments on Wednesday by Mr Erik Asbrink, the Swedish finance minister, that Sweden's entry into Emu could be delayed beyond its planned 1999 start date.

Although the market was always uncertain that Sweden would be in the first round of Emu, Mr Asbrink's comments strengthened the view that the kroner would remain outside the European exchange rate mechanism (ERM) for the time being.

On Wednesday domestic bond yields rose and the kroner suffered against the D-Mark, dropping from SKr4.463 to SKr4.474, before yesterday's recovery. Its recovery was aided by a failure to break through technical support at SKr4.49.

In contrast, Finland's markka strengthened on speculation that the Finnish central bank would join the ERM, at a rate of FM3.05 to FM3.10 to the D-Mark, sometime in late September or October.

■ Pound in New York

Aug 29	—Latest—	— Prev. close —
£ spot	1.5569	1.5586
1 mth	1.5556	1.5580
3 mth	1.5554	1.5567
1 yr	1.5582	1.5608

■ OTHER CURRENCIES

Aug 29	£	$
Czech Rp	40.9301 - 40.9796	26.0310 - 26.0510
Hungary	235.512 - 235.886	151.250 - 151.310
Iran	4673.10 - 4671.00	3000.00 - 3000.00
Kuwait	0.4655 - 0.4665	0.2990 - 0.2985
Poland	4.2631 - 4.2681	2.7380 - 2.7400
Russia	8345.52 - 8353.85	5359.00 - 5363.00
U.A.E.	5.7182 - 5.7218	3.6726 - 3.6731

POUND SPOT FORWARD AGAINST THE POUND

Aug 29		Closing mid-point	Change on day	Bid/offer spread	Day's Mid high	low	One month Rate	%PA	Three months Rate	%PA	One year Rate	%PA	Bank of Eng. Index
Europe													
Austria	(Sch)	16.2217	+0.0263	143 - 291	16.2295	16.1823	16.1904	2.2	16.1154	2.6	-	-	105.3
Belgium	(BFr)	47.4836	+0.0497	418 - 254	47.5360	47.2530	47.3886	2.4	47.1986	2.4	46.4286	2.2	107.4
Denmark	(DKr)	8.9120	+0.0142	076 - 163	8.9165	8.8941	8.8993	1.9	8.878	1.5	8.7701	1.8	108.1
Finland	(FM)	6.9732	-0.0118	677 - 787	7.0150	6.9560	6.9886	0.8	6.9607	0.7	-	-	85.5
France	(FFr)	7.8974	+0.0112	940 - 007	7.9049	7.8601	7.8832	2.2	7.8592	1.9	7.7523	1.8	108.7
Germany	(DM)	2.3052	+0.0037	042 - 062	2.3063	2.2995	2.3003	2.8	2.2906	2.5	2.2485	2.5	109.5
Greece	(Dr)	369.045	+0.894	573 - 518	369.523	367.816	-	-	-	-	-	-	67.2
Ireland	(I£)	0.9618	+0.0003	611 - 624	0.9636	0.9608	0.9613	0.6	0.9601	0.7	0.9556	0.6	99.9
Italy	(L)	2357.35	+0.41	604 - 867	2364.42	2354.01	2362.9	-2.8	2372.75	-2.6	2405.25	-2.0	76.3
Luxembourg	(LFr)	47.4836	+0.0497	418 - 254	47.5360	47.2530	47.3886	2.4	47.1986	2.4	46.4286	2.2	107.4
Netherlands	(Fl)	2.5841	+0.0025	831 - 850	2.5885	2.5792	2.578	2.8	2.568	2.8	2.5183	2.5	107.8
Norway	(NKr)	10.0049	+0.0214	972 - 126	10.0291	9.9451	9.9964	1.0	9.9704	1.0	9.8959	1.1	98.2
Portugal	(Es)	236.406	+0.289	790 - 815	236.523	236.158	236.631	-2.2	237.736	-2.3	-	-	95.2
Spain	(Pta)	195.113	+0.434	030 - 195	195.197	194.641	195.373	-1.6	195.888	-1.6	197.288	-1.1	80.6
Sweden	(SKr)	10.3149	+0.0153	087 - 230	10.3507	10.3048	10.3162	0.0	10.3153	0.0	10.3133	0.0	88.8
Switzerland	(SFr)	1.8641	+0.0006	630 - 652	1.8656	1.8591	1.8591	3.2	1.8483	3.4	1.8001	3.4	113.5
UK	(£)	-	-	-	-	-	-	-	-	-	-	-	85.0
Ecu	-	1.2245	+0.001	242 - 254	1.2274	1.2228	1.2235	1.3	1.2206	1.4	1.2072	1.4	-
SDR†	-	1.06780	-	-	-	-	-	-	-	-	-	-	-
Americas													
Argentina	(Peso)	1.5552	-0.002	547 - 557	1.5618	1.5543	-	-	-	-	-	-	-
Brazil	(R$)	1.5829	-0.0015	824 - 834	1.5861	1.5818	-	-	-	-	-	-	-
Canada	(C$)	2.1282	-0.0032	273 - 291	2.1348	2.1271	2.1275	0.4	2.1239	0.8	2.1158	0.6	84.1
Mexico	(New Peso)	11.7090	-0.0251	983 - 186	11.7192	11.6912	-	-	-	-	-	-	-
USA	($)	1.5574	-0.0019	570 - 577	1.5620	1.5560	1.5569	0.4	1.5557	0.2	1.5589	0.0	96.1
Pacific/Middle East/Africa													
Australia	(A$)	1.9676	-0.0044	659 - 693	1.9717	1.9621	1.9702	-1.6	1.9752	-1.5	2.0004	-1.7	92.8
Hong Kong	(HK$)	12.0414	-0.0152	379 - 449	12.0788	12.0316	12.0333	0.8	12.0217	0.7	12.0019	0.3	-
India	(Rs)	55.5196	-0.1475	857 - 435	55.8520	55.1880	-	-	-	-	-	-	-
Israel	(Shk)	4.8916	-0.003	886 - 966	4.9017	4.8856	-	-	-	-	-	-	-
Japan	(Y)	168.817	-0.219	732 - 901	169.290	168.540	168.092	5.2	166.602	5.2	160.187	5.1	133.7
Malaysia	(M$)	3.8944	-0.0054	927 - 960	3.8956	3.8816	-	-	-	-	-	-	-
New Zealand	(NZ$)	2.2471	-0.0042	438 - 484	2.2523	2.2443	2.2521	-2.7	2.2616	-2.6	2.2954	-2.1	108.3
Philippines	(Peso)	40.7946	-0.0511	311 - 585	40.8619	40.7219	-	-	-	-	-	-	-
Saudi Arabia	(SR)	5.8408	-0.0074	392 - 423	5.8580	5.8359	-	-	-	-	-	-	-
Singapore	(S$)	2.1920	-0.0012	907 - 932	2.1977	2.1901	-	-	-	-	-	-	-
South Africa	(R)	7.0198	-0.0127	143 - 252	7.0345	7.0120	-	-	-	-	-	-	-
South Korea	(Won)	1276.64	-1.13	627 - 700	1280.37	1275.61	-	-	-	-	-	-	-
Taiwan	(T$)	42.8007	-0.0739	832 - 181	42.9208	42.7713	-	-	-	-	-	-	-
Thailand	(Bt)	39.4048	-0.022	921 - 176	39.5080	39.3680	-	-	-	-	-	-	-

† Rates for Aug 28. Bid/offer spreads in the Pound Spot table show only the last three decimal places. Forward rates are not directly quoted to the market but are implied by current interest rates. Sterling index calculated by the Bank of England. Base average 1990 = 100. Index rebased 1/2/95. Bid, Offer and Mid-rates in both this and the Dollar Spot tables derived from THE WM/REUTERS CLOSING SPOT RATES. Some values are rounded by the F.T.

DOLLAR SPOT FORWARD AGAINST THE DOLLAR

Aug 29		Closing mid-point	Change on day	Bid/offer spread	Day's mid high	low	One month Rate	%PA	Three months Rate	%PA	One year Rate	%PA	J.P. Morgan Index
Europe													
Austria	(Sch)	10.4162	+0.0299	138 - 186	10.4189	10.3778	10.3967	2.2	10.3547	2.4	10.1712	2.4	105.4
Belgium	(BFr)	30.4900	+0.07	700 - 100	30.5110	30.3350	30.435	2.2	30.3275	2.1	29.825	2.2	107.1
Denmark	(DKr)	5.7225	+0.0162	210 - 240	5.7245	5.7040	5.715	1.6	5.698	1.7	5.629	1.6	107.5
Finland	(FM)	4.4778	-0.006	731 - 821	4.5020	4.4635	4.4771	1.7	4.4581	1.7	4.4136	1.4	84.5
France	(FFr)	5.0710	+0.014	700 - 720	5.0741	5.0572	5.0684	1.8	5.0495	1.7	4.9805	1.8	108.3
Germany	(DM)	1.4802	+0.0042	799 - 805	1.4807	1.4751	1.4775	2.2	1.4717	2.3	1.4445	2.4	109.0
Greece	(Dr)	236.970	+0.87	720 - 220	237.280	235.860	236.645	-4.5	241.995	-4.5	255.57	-8.0	66.9
Ireland	(I£)	1.6193	-0.0025	185 - 200	1.6240	1.6178	1.6199	-0.4	1.6207	-0.4	1.6122	0.4	-
Italy	(L)	1513.70	+2.18	319 - 420	1515.42	1510.30	1518.45	-3.8	1526.8	-3.4	1549.35	-2.4	75.8
Luxembourg	(LFr)	30.4900	+0.07	700 - 100	30.5110	30.3350	30.435	2.2	30.3275	2.1	29.825	2.2	107.1
Netherlands	(Fl)	1.6593	+0.0037	590 - 595	1.6614	1.6545	1.658	2.4	1.6498	2.5	1.6171	2.5	107.1
Norway	(NKr)	6.4243	+0.0217	208 - 278	6.4310	6.3853	6.4215	0.6	6.4156	0.5	6.3795	0.7	97.8
Portugal	(Es)	151.800	+0.38	750 - 850	151.850	151.450	152.115	-2.5	152.705	-2.4	154.85	-2.0	95.8
Spain	(Pta)	125.285	+0.435	260 - 310	125.330	124.910	125.535	-2.4	125.965	-2.2	127.505	-1.8	80.6
Sweden	(SKr)	6.6234	+0.0181	198 - 271	6.6391	6.6187	6.6225	0.2	6.6249	-0.1	6.5999	0.4	88.3
Switzerland	(SFr)	1.1970	+0.0056	965 - 974	1.1976	1.1920	1.1935	3.6	1.186	3.7	1.1525	3.7	113.5
UK	(£)	1.5574	-0.0019	570 - 577	1.5620	1.5560	1.5569	0.4	1.5557	0.2	1.5569	0.0	84.6
Ecu		1.2716	-0.0026	712 - 719	1.2748	1.2701	1.2724	-0.7	1.274	-0.8	1.2829	-0.9	-
SDR†		0.68580	-	-	-	-	-	-	-	-	-	-	-
Americas													
Argentina	(Peso)	0.9986	-	985 - 987	0.9999	0.9984	-	-	-	-	-	-	-
Brazil	(R$)	1.0164	+0.0003	163 - 165	1.0167	1.0159	-	-	-	-	-	-	-
Canada	(C$)	1.3666	-0.0003	663 - 668	1.3670	1.3655	1.3664	0.1	1.3667	0.0	1.3695	-0.2	83.3
Mexico	(New Peso)	7.5185	+0.0255	140 - 230	7.5240	7.5130	7.68	-25.8	7.865	-18.4	9.8285	-26.1	-
USA	($)	-	-	-	-	-	-	-	-	-	-	-	96.8
Pacific/Middle East/Africa													
Australia	(A$)	1.2634	-0.0011	626 - 642	1.2653	1.2623	1.2654	-1.9	1.2689	-1.7	1.2876	-1.9	94.0
Hong Kong	(HK$)	7.7320	-0.0001	315 - 325	7.7330	7.7314	7.7327	-0.1	7.7345	-0.1	7.7615	-0.4	-
India	(Rs)	35.6500	-0.05	500 - 500	35.8600	35.3600	35.8	-5.0	36.105	-5.1	37.575	-5.4	-
Israel	(Shk)	3.1410	+0.002	385 - 435	3.1457	3.1374	-	-	-	-	-	-	-
Japan	(Y)	108.400	-0.005	370 - 430	108.510	108.210	107.955	4.9	107.065	5.0	103.315	4.7	133.9
Malaysia	(M$)	2.4942	-0.0004	937 - 947	2.4955	2.4935	2.4951	-0.4	2.5012	-1.1	2.5247	-1.2	-
New Zealand	(NZ$)	1.4429	-0.0008	424 - 434	1.4435	1.4419	1.4459	-2.6	1.4517	-2.5	1.4783	-2.3	-
Philippines	(Peso)	26.1950	-	800 - 300	26.2300	26.1800	-	-	-	-	-	-	-
Saudi Arabia	(SR)	3.7505	-	503 - 506	3.7507	3.7502	3.751	-0.1	3.7517	-0.1	3.755	-0.1	-
Singapore	(S$)	1.4075	+0.001	070 - 080	1.4088	1.4058	1.404	3.0	1.398	2.7	1.3725	2.5	-
South Africa	(R)	4.5075	-0.0025	050 - 100	4.5175	4.5020	4.555	-12.8	4.645	-12.2	4.9825	-10.5	-
South Korea	(Won)	819.750	+0.3	700 - 800	820.000	819.500	-	-	-	-	-	-	-
Taiwan	(T$)	27.4830	-0.013	780 - 880	27.5060	27.4780	27.488	-0.2	27.493	-0.1	-	-	-
Thailand	(Bt)	25.3025	+0.0175	000 - 050	25.3070	25.2900	25.4012	-4.7	25.605	-4.8	26.4875	-4.7	-

† SDR rate per $ for Aug 28 Bid/offer spreads in the Dollar Spot table show only the last three decimal places. Forward rates are not directly quoted to the market but are implied by current interest rates. UK, Ireland & ECU are quoted in US currency. J.P. Morgan nominal indices Aug 28: Base average 1990=100.

WORLD INTEREST RATES

MONEY RATES

August 29	Over night	One month	Three mths	Six mths	One year	Lomb. inter.	Dis. rate	Repo rate
Belgium	3¼	3¼	3¼	3⅜	3½	6.00	2.50	-
week ago	3	3¼	3¼	3⅜	3½	6.00	2.50	-
France	3⅞	3¾	3¾	4⅛	4⅛	3.35	-	4.75
week ago	3¾	3¾	3¾	3¾	3⅞	3.35	-	4.75
Germany	3⅜	3	3	3¼	3⅜	4.50	2.50	3.00
week ago	3⅜	3	3¼	3⅜	3⅜	4.50	2.50	3.00
Ireland	5¼	5¾	5¾	6⅛	6¼	-	-	6.25
week ago	5¼	5¾	5¾	5⅞	5⅞	-	-	6.25
Italy	8⅞	8¾	8¾	8½	8⅜	-	8.25	8.85
week ago	8¾	8¾	8⅞	8¼	8⅜	-	8.25	8.85
Netherlands	2⅞	2⅞	2¾	2⅞	3⅛	-	3.00	3.30
week ago	2¾	2⅞	2⅝	2⅞	3⅛	-	3.00	3.30
Switzerland	1⅜	1⅞	2¼	2⅜	2⅜	-	1.50	-
week ago	2⅞	1⅞	2⅛	2⅜	2¼	-	1.50	-
US	5⅜	5¼	5⅜	5⅝	6⅛	-	5.00	-
week ago	5⅜	5¼	5⅜	5½	5⅝	-	5.00	-
Japan	½	½	½	⅝	¾	-	0.50	-
week ago	½	½	½	⅝	¾	-	0.50	-
■ $ LIBOR FT London								
Interbank Fixing	-	5½	5½	5⅝	6⅛	-	-	-
week ago	-	5½	5⅝	5⅝	5¾	-	-	-
US Dollar CDs	-	5.08	5.19	5.33	5.65	-	-	-
week ago	-	5.08	5.16	5.26	5.49	-	-	-
ECU Linked Ds	-	4⅜	4¼	4⅜	4¼	-	-	-
week ago	-	4⅜	4¼	4⅜	4⅜	-	-	-
SDR Linked Ds	-	3⅜	3⅜	3½	3¾	-	-	-
week ago	-	3⅜	3⅜	3⅜	3⅞	-	-	-

$ LIBOR interbank fixing rates are offered rates for $10m quoted to the market by four reference banks at 11am each working day. The banks are: Bankers Trust, Bank of Tokyo, Barclays and National Westminster.
Mid rates are shown for the domestic Money Rates, US$ CDs, ECU & SDR Linked Deposits (Ds).

EURO CURRENCY INTEREST RATES

Aug 29	Short term	7 days notice	One month	Three months	Six months	One year
Belgian Franc	3⅛ - 2⅞	3⅛ - 3	3⅛ - 3⅛	3⅛ - 3⅛	3⅜ - 3¼	3½ - 3⅜
Danish Krone	3¾ - 3⅞	3⅝ - 3½	3⅝ - 3⅝	3⅝ - 3¼	4⅛ - 3⅞	4⅛ - 4⅛
D-Mark	3⅛ - 2⅞	3⅛ - 2⅞	3⅛ - 2⅞	3⅛ - 2⅞	3⅛ - 2⅞	3⅜ - 3¼
Dutch Guilder	2¾ - 2⅝	2⅞ - 2¾	2¾ - 2¾	2⅞ - 2¾	2⅞ - 2¾	3⅛ - 3⅛
French Franc	3⅞ - 3⅞	3⅞ - 3⅞	3⅞ - 3⅞	4⅛ - 3⅞	4⅛ - 4⅛	4⅜ - 4¼
Portuguese Esc.	7 - 6⅞	7⅛ - 7⅛	7¼ - 7⅛	7⅛ - 7⅛	7⅛ - 7⅛	7⅜ - 7¼
Spanish Peseta	7⅞ - 7⅜	7½ - 7⅜	7⅞ - 7⅜	7⅜ - 7⅛	7⅜ - 7⅛	7⅜ - 7⅛
Sterling	5¾ - 5¼	5¾ - 5⅝	5¾ - 5⅝	5⅞ - 5⅞	5¾ - 5⅝	5⅞ - 5⅞
Swiss Franc	2¼ - 2⅛	1⅞ - 1⅞	2⅛ - 2	2⅛ - 2⅛	2¼ - 2⅛	2⅜ - 2¼
Can. Dollar	4⅛ - 3⅞	4⅛ - 3⅞	4⅛ - 3⅞	4⅛ - 4⅛	4⅜ - 4⅛	4¾ - 4⅝
US Dollar	5⅜ - 5⅛	5⅜ - 5⅛	5⅜ - 5⅛	5⅜ - 5¼	5⅝ - 5½	6 - 5⅞
Italian Lira	8⅞ - 8⅝	8⅞ - 8⅝	8⅝ - 8½	8⅝ - 8½	8⅜ - 8⅛	8⅛ - 8⅛
Yen	½ - ⅜	⅜ - ⅜	⅜ - ⅜	½ - ⅜	⅝ - ½	⅝ - ½
Asian $Sing	3¾ - 3⅝	3⅜ - 3⅜	3⅜ - 3⅜	3⅜ - 3⅜	3⅜ - 3⅜	3⅝ - 3½

Short term rates are call for the US Dollar and Yen, others: two days' notice.

■ THREE MONTH PIBOR FUTURES (MATIF) Paris Interbank offered rate (FFr 5m)

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Sep	95.67	95.80	+0.04	95.81	95.65	43,878	49,581
Dec	95.63	95.75	+0.04	95.75	95.61	32,808	50,741
Mar	95.70	95.81	+0.05	95.81	95.70	7,832	35,574

■ THREE MONTH EUROMARK FUTURES (LIFFE)* DM1m points of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Sep	96.83	96.83	-	96.85	96.83	23808	168560
Dec	96.80	96.79	-	96.81	96.78	34477	234898
Mar	96.65	96.64	+0.01	96.66	96.62	20893	204137
Jun	96.41	96.41	+0.02	96.44	96.40	19606	145674

■ THREE MONTH EUROLIRA FUTURES (LIFFE)* L1000m points of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Sep	91.28	91.36	+0.03	91.39	91.27	11264	48876
Dec	91.79	91.85	+0.05	91.87	91.74	9890	47016
Mar	92.05	92.13	+0.07	92.14	92.03	4222	24014
Jun	92.14	92.22	+0.08	92.22	92.14	1626	17538

■ THREE MONTH EURO SWISS FRANC FUTURES (LIFFE) SFr1m points of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Sep	97.83	97.80	-0.02	97.85	97.79	4909	25174
Dec	97.83	97.79	-0.02	97.86	97.77	7655	36072
Mar	97.63	97.60	-0.03	97.68	97.58	1984	12679
Jun	97.38	97.33	-0.03	97.42	97.35	272	4398

■ THREE MONTH EUROYEN FUTURES (LIFFE) Y100m points of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Sep	99.44	99.44	-	99.44	99.43	934	n/a
Dec	99.29	99.30	+0.01	99.30	99.29	1901	n/a
Mar	99.13	99.13	+0.01	99.13	99.13	1600	n/a

■ THREE MONTH ECU FUTURES (LIFFE) Ecu1m points of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Sep	95.58	95.62	+0.02	95.63	95.55	1163	8783
Dec	95.58	95.62	+0.02	95.62	95.58	450	6564
Mar	95.54	95.57	+0.02	95.59	95.52	276	3036
Jun	95.35	95.38	+0.03	95.40	95.34	53	2949

* LIFFE futures also traded on APT

CROSS RATES AND DERIVATIVES

EXCHANGE CROSS RATES

Aug 29		BFr	DKr	FFr	DM	I£	L	Fl	NKr	Es	Pta	SKr	SFr	£	C$	$	Y	Ecu
Belgium	(BFr)	100	18.77	16.63	4.855	2.026	4964	5.442	21.06	497.9	410.9	21.71	3.926	2.106	4.482	3.279	355.5	2.580
Denmark	(DKr)	53.28	10	8.861	2.586	1.079	2645	2.899	11.22	265.3	218.9	11.57	2.092	1.122	2.388	1.747	189.4	1.375
France	(FFr)	60.12	11.29	10	2.919	1.218	2985	3.272	12.66	299.4	247.1	13.06	2.360	1.266	2.695	1.972	213.8	1.551
Germany	(DM)	20.60	3.866	3.426	1	0.417	1023	1.121	4.338	102.6	84.64	4.473	0.809	0.434	0.923	0.675	73.23	0.531
Ireland	(I£)	49.38	9.264	8.209	2.396	1	2450	2.686	10.40	245.7	202.8	10.72	1.938	1.040	2.212	1.619	175.5	1.273
Italy	(L)	2.014	0.378	0.335	0.098	0.041	100.	0.110	0.424	10.03	8.277	0.437	0.079	0.042	0.090	0.066	7.162	0.052
Netherlands	(Fl)	18.37	3.449	3.056	0.892	0.372	912.2	1	3.870	91.49	75.50	3.990	0.721	0.387	0.824	0.603	65.33	0.474
Norway	(NKr)	47.48	8.912	7.897	2.305	0.962	2357	2.584	10	236.4	195.1	10.31	1.864	1.000	2.128	1.557	168.8	1.225
Portugal	(Es)	20.08	3.770	3.341	0.975	0.407	997.0	1.093	4.230	100.	82.53	4.361	0.788	0.423	0.900	0.659	71.40	0.518
Spain	(Pta)	24.34	4.568	4.048	1.181	0.493	1208	1.324	5.126	121.2	100.	5.284	0.955	0.513	1.091	0.798	86.52	0.628
Sweden	(SKr)	46.05	8.644	7.660	2.236	0.933	2286	2.506	9.699	229.3	189.2	10	1.808	0.970	2.064	1.510	163.7	1.188
Switzerland	(SFr)	25.47	4.781	4.237	1.237	0.516	1264	1.386	5.365	126.8	104.7	5.531	1	0.536	1.142	0.835	90.58	0.657
UK	(£)	47.48	8.912	7.897	2.305	0.962	2357	2.584	10.00	236.4	195.1	10.31	1.864	1	2.128	1.557	168.8	1.225
Canada	(C$)	22.31	4.188	3.711	1.083	0.452	1108	1.214	4.699	111.1	91.68	4.845	0.876	0.470	1	0.732	79.32	0.576
US	($)	30.49	5.724	5.072	1.480	0.618	1514	1.660	6.423	151.8	125.3	6.622	1.197	0.642	1.367	1	108.4	0.787
Japan	(Y)	28.13	5.280	4.678	1.366	0.570	1396	1.531	5.924	140.0	115.6	6.108	1.104	0.592	1.261	0.922	100.	0.726
Ecu		38.76	7.275	6.447	1.882	0.785	1924	2.109	8.163	193.0	159.3	8.416	1.522	0.816	1.737	1.271	137.8	1

Danish Kroner, French Franc, Norwegian Kroner, and Swedish Kronor per 10; Belgian Franc, Yen, Escudo, Lira and Peseta per 100.

■ D-MARK FUTURES (IMM) DM 125,000 per DM

	Open	Latest	Change	High	Low	Est. vol	Open int.
Sep	0.6778	0.6772	-0.0008	0.6786	0.6768	13,003	66,730
Dec	0.6813	0.6815	-0.0005	0.6815	0.6811	485	6,659
Mar	-	0.6866	-	-	-	2	955

■ JAPANESE YEN FUTURES (IMM) Yen 12.5 per Yen 100

	Open	Latest	Change	High	Low	Est. vol	Open int.
Sep	0.9240	0.9245	-0.0003	0.9259	0.9234	14,494	73,253
Dec	0.9370	0.9365	-0.0002	0.9374	0.9365	749	6,589
Mar	-	0.9490	-	-	0.9482	23	186

■ SWISS FRANC FUTURES (IMM) SFr 125,000 per SFr

	Open	Latest	Change	High	Low	Est. vol	Open int.
Sep	0.8398	0.8382	-0.0020	0.8404	0.8376	7,694	37,423
Dec	0.8453	0.8453	-0.0019	0.8457	0.8446	302	3,496
Mar	-	0.8530	-0.0019	-	0.8530	48	626

■ STERLING FUTURES (IMM) £62,500 per £

	Open	Latest	Change	High	Low	Est. vol	Open int.
Sep	1.5580	1.5574	-0.0014	1.5600	1.5564	6,871	51,851
Dec	1.5580	1.5566	-0.0020	1.5580	1.5586	889	2,626
Mar	-	1.5570	-0.0016	-	1.5570	3	9

UK INTEREST RATES

LONDON MONEY RATES

Aug 29	Over-night	7 days notice	One month	Three months	Six months	One year
Interbank Sterling	6¼ - 4	5⅞ - 5⅝	5¾ - 5⅝	5⅞ - 5⅞	5⅞ - 5⅞	6 - 5⅞
Sterling CDs	-	-	5¾ - 5⅝	5¾ - 5⅝	5⅞ - 5⅝	5⅞ - 5⅞
Treasury Bills	-	-	5⅞ - 5⅞	5⅜ - 5½	-	-
Bank Bills	-	-	5⅞ - 5⅝	5⅞ - 5⅝	5⅞ - 5⅜	-
Local authority deps.	5⅞ - 5⅜	5¾ - 5⅝	5¾ - 5⅝	5⅞ - 5⅞	5⅞ - 5¾	5⅞ - 5⅞
Discount Market deps	6¼ - 5⅞	5¾ - 5⅝	-	-	-	-

UK clearing bank base lending rate 5¾ per cent from June 6, 1996

	Up to 1 month	1-3 month	3-6 months	6-9 months	9-12 months
Certs of Tax dep. (£100,000)	2½	5½	5	5	4¾

Certs of Tax dep. under £100,000 is 2½pc. Deposits withdrawn for cash 1¼pc. Ave. tender rate of discount on Aug 23, 5.5335pc. ECGD fixed rate Stlg. Export Finance. Make up day Aug 30, 1996. Agreed rate for period Sep 25, 1996 to Oct 25, 1996, Schemes II & III 7.07pc. Reference rate for period Aug 1, 1996 to Aug 30, 1996, Schemes IV & V 5.825pc. Finance House Base Rate 6pc from Aug 1, 1996

■ THREE MONTH STERLING FUTURES (LIFFE) £500,000 points of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Sep	94.26	94.26	-	94.27	94.26	4763	69195
Dec	94.28	94.27	-	94.29	94.26	8365	113737
Mar	94.08	94.09	+0.01	94.11	94.07	6125	78540
Jun	93.72	93.72	+0.01	93.75	93.70	5801	55863
Sep	93.32	93.32	+0.02	93.34	93.30	1168	35248

Also traded on APT. All Open interest figs. are for previous day.

■ SHORT STERLING OPTIONS (LIFFE) £500,000 points of 100%

Strike Price	CALLS Sep	Dec	Mar	PUTS Sep	Dec	Mar
9425	0.06	0.15	0.17	0.05	0.13	0.33
9450	0	0.05	0.09	0.24	0.28	0.50
9475	0	0.02	0.04	0.49	0.50	0.70

Est. vol. total, Calls 3754 Puts 2737. Previous day's open int., Calls 147738 Puts 141370

BASE LENDING RATES

	%		%		%
Adam & Company	5.75	Cyprus Popular Bank	5.75	NatWestminster	5.75
Allied Trust Bank	5.75	Duncan Lawrie	5.75	●Rea Brothers	5.75
AIB Bank	5.75	Exeter Bank Limited	6.75	Royal Bk of Scotland	5.75
●Henry Ansbacher	5.75	Financial & Gen Bank	7.00	●Singer & Friedlander	5.75
Bank of Baroda	5.75	●Robert Fleming & Co	5.75	●Smith & Williamson Secs	5.75
Banco Bilbao Vizcaya	5.75	Girobank	5.75	Scottish Widows Bank	5.75
Bank of Cyprus	5.75	●Guinness Mahon	5.75	TSB	5.75
Bank of Ireland	5.75	Habib Bank AG Zurich	5.75	United Bank of Kuwait	5.75
Bank of India	5.75	●Hambros Bank	5.75	Unity Trust Bank Plc	5.75
Bank of Scotland	5.75	Heritable & Gen Inv Bk	5.75	Western Trust	5.75
Barclays Bank	5.75	●Hill Samuel	5.75	Whiteaway Laidlaw	5.75
Brit Bk of Mid East	5.75	C. Hoare & Co	5.75	Yorkshire Bank	5.75
●Brown Shipley & Co Ltd	5.75	Hongkong & Shanghai	5.75		
Citibank NA	5.75	Julian Hodge Bank	5.75		
Clydesdale Bank	5.75	●Leopold Joseph & Sons	5.75		
The Co-operative Bank	5.75	Lloyds Bank	5.75		
Coutts & Co	5.75	Midland Bank	5.75		
Credit Lyonnais	5.75	*Mount Credit Corp	6.00		

● Members of London Investment Banking Association
* In administration

EMS EUROPEAN CURRENCY UNIT RATES

Aug 29	Ecu cen. rates	Rate against Ecu	Change on day	% +/- from cen. rate	% spread v weakest	Div. ind.
Spain	162.493	160.918	+0.087	-0.97	2.74	7
Netherlands	2.15214	2.13180	-0.00082	-0.95	2.72	7
Belgium	39.3960	39.1615	-0.0105	-0.60	2.36	4
Germany	1.91007	1.90098	-0.00043	-0.48	2.23	5
Austria	13.4383	13.3770	-0.0029	-0.46	2.21	3
Portugal	195.792	195.052	-0.042	-0.38	2.13	3
Ireland	0.792214	0.794014	-0.000262	0.23	1.52	-2
Denmark	7.28580	7.35175	+0.00048	0.91	0.83	-6
France	6.40608	6.51802	+0.00436	1.75	0.00	-15
NON ERM MEMBERS						
Greece	292.867	304.389	+0.225	3.93	-2.10	-
Italy	2106.15	1949.10	+1.86	-7.46	9.95	-
UK	0.786652	0.825710	-0.00076	4.97	-3.07	-

Ecu central rates set by the European Commission. Currencies are in descending relative strength. Percentage changes are for Ecu; a positive change denotes a weak currency. Divergence shows the ratio between two spreads: the percentage difference between the actual market and Ecu central rates for a currency, and the maximum permitted percentage deviation of the currency's market rate from its Ecu central rate.
(17/9/92) Sterling and Italian Lira suspended from ERM. Adjustment calculated by the Financial Times.

■ PHILADELPHIA SE £/$ OPTIONS £31,250 (cents per pound)

Strike Price	CALLS Sep	Oct	Nov	PUTS Sep	Oct	Nov
1.530	2.80	-	-	-	0.14	0.46
1.540	1.90	2.20	2.54	0.01	0.33	0.73
1.550	1.08	1.51	1.86	0.20	0.64	1.09
1.560	0.48	0.95	1.43	0.60	1.08	1.55
1.570	0.14	0.55	1.00	1.26	1.68	2.12

Previous day's vol., Calls 2,824 Puts 1,925 . Prev. day's open int., Calls 161,298 Puts 143,581

■ THREE MONTH EURODOLLAR (IMM) $1m points of 100%

	Open	Latest	Change	High	Low	Est. vol	Open int.
Sep	94.41	94.39	-0.01	94.42	94.39	33,435	389,477
Dec	94.08	94.06	-0.02	94.10	94.04	46,030	470,946
Mar	93.91	93.88	-0.03	93.94	93.86	54,455	304,050

■ US TREASURY BILL FUTURES (IMM) $1m per 100%

	Open	Latest	Change	High	Low	Est. vol	Open int.
Sep	94.92	94.91	-	94.92	94.91	481	5,414
Dec	94.69	94.66	-0.02	94.69	94.66	1,303	3,198
Mar	-	94.48	-0.02	94.53	94.48	14	985

All Open interest figs. are for previous day

■ EUROMARK OPTIONS (LIFFE) DM1m points of 100%

Strike Price	CALLS Sep	Oct	Nov	Dec	PUTS Sep	Oct	Nov	Dec
9675	0.09	0.09	0.11	0.12	0.01	0.05	0.07	0.08
9700	0.01	0.02	0.01	0.03	0.18	0.23	0.22	0.24
9725	0	0.01	0	0.01	0.42	0.47	0.46	0.47

Est. vol. total, Calls 11214 Puts 8310. Previous day's open int., Calls 401009 Puts 349410

■ EURO SWISS FRANC OPTIONS (LIFFE) SFr 1m points of 100%

Strike Price	CALLS Sep	Dec	Mar	PUTS Sep	Dec	Mar
9800	0.02	0.08	0.10	0.22	0.29	0.50
9825	0	0.04	0.04	0.45	0.50	0.89

Est. vol. total, Calls 0 Puts 0. Previous day's open int., Calls 9518 Puts 6440

■ EUROLIRA OPTIONS (LIFFE) L1000m points of 100%

Strike Price	CALLS Sep	Dec	Mar	PUTS Sep	Dec	Mar
9125	0.16	0.89	0.99	0.05	0.09	0.11
9150	0.04	0.50	0.79	0.18	0.15	0.16
9175	0.01	0.34	0.62	0.40	0.24	0.24

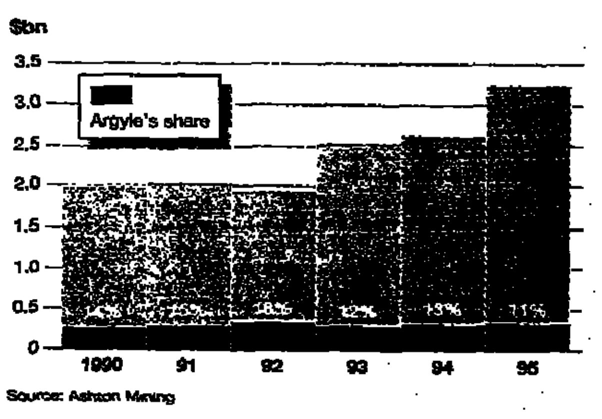
Est. vol. total, Calls 1455 Puts 270. Previous day's open int., Calls 87155 Puts 30855

COMMODITIES AND AGRICULTURE

De Beers blamed for Indian diamond turmoil

By Kenneth Gooding, Mining Correspondent

Indian net rough diamond imports



Source: Ashton Mining

Blame for the turmoil in the Indian diamond cutting industry lay squarely with De Beers and its Central Selling Organisation, which is responsible for the international rough (or uncut) diamond cartel, said Mr John Robinson, managing director of Ashton Mining, yesterday.

De Beers suggested recently that it was the decision of the partners in Australia's Argyle diamond mine, the world's biggest producer in volume terms, to quit the cartel in June that caused upheaval in the Indian cutting industry. Some 95 per cent of Argyle's production goes to India.

Ashton owns 40.25 per cent of Argyle and the rest is in the hands of RTZ-CRA, the Anglo-Australian group.

In the second quarter of this year De Beers increased its sales to India by at least 60 per cent, said Mr Robinson. There could be only one reason – it was a warning to Argyle about what to expect if it left the cartel.

However, the scheme backfired on De Beers, he said. In order to persuade the Indian cutters to take the extra diamonds De Beers assured them that Argyle would sign a new contract with the cartel. When Argyle quit, many Indian buyers were very angry and there was even a threat of a boycott of CSO imports. De Beers accounts for about 30 per cent in value of the rough diamonds imported by India, Ashton estimates, while Argyle accounts for about 11 per cent.

Mr Robinson, in London to talk to analysts and investors, said that, while it was true that buyers of polished diamonds from India were holding back to see if there would be a price war between Argyle and the CSO, problems in the cutting industry were being exaggerated.

The rise in diamond stocks and debt had to be seen in the context of a fast-growing industry. Between 1992 and 1995 the value of polished diamond exports from India jumped by 90 per cent, from US$2.4bn to $4.6bn.

Argyle had no intention of waging a price war and the CSO would remain the industry's "price setter" for rough diamonds. There was no need for a price war because no extra diamonds were coming to market, they were simply coming to market via a different channel. Argyle would produce about 94.4m carats this year, slightly down on the 1995 level because last September it stopped extracting very small diamonds from the material it processes.

He explained that Argyle decided to leave the cartel because of "a misalignment of interests" between the Australian mine and De Beers. He claimed that the CSO did not put enough effort into promoting the smaller diamonds that made up most of Argyle's output and it did not put enough effort into defending prices of those diamonds. Argyle believed it would do better to strengthen and develop its existing relationships with the Indian cutters and continue to strengthen the marketing of Indian polished diamonds in the US.

Mr Robinson squashed the idea that Argyle might rejoin the cartel at some stage. "We would not wish to go back to any arrangement with the CSO." However, Ashton is determined to become a substantial diamond producer on its own account and would look at each individual situation to see if it should join the cartel. "Argyle was poorly served by its CSO contract because De Beers is self-serving. But if your interests coincide with those of De Beers, you could do well in the cartel."

Argyle had delayed until the year-end a decision about whether to prolong the life of the mine by moving to underground mining at an estimated cost of A$250m-$300m, said Mr Robinson. Ashton itself was spending A$23m this year on exploration and a decision whether to develop a mine at its Merlin deposit in Australia's Northern Territories would be made in mid-October. Stage one would cost about A$25m but Mr Robinson said he hoped there was a diamond "province" capable of supporting several mines in the Merlin area.

Swedish group to launch London pulp futures

By Greg McIvor in Stockholm

OM Gruppen, the Swedish derivatives exchange operator, is to launch a trading bourse for wood pulp futures and options in London early next year.

The decision to launch the exchange, planned to operate via OM's London Securities & Derivatives Exchange, reflects growing interest from forestry companies in instruments that can offer hedging protection against cyclical price swings.

Violent lurches in pulp prices in recent years have brought see-sawing profits for paper companies. In just over two years prices have sunk from USD1,000 per tonne to USD400, and are now rising again. The pulp market, once dominated by North American and Scandinavian (Norscan) groups, has become increasingly volatile following the emergence of large producers in the Asia-Pacific region and Latin America. Among commodities, only oil is thought to have experienced bigger price gyrations in the past decade.

OM said the exchange would open for trading in the first quarter of 1997. Pulp futures and options would be traded initially, and the market would later be extended to derivatives in timber, waste paper, newsprint and other grades.

The scheme is a direct challenge to the Finnish Options and Futures Exchange, which is due to launch a new market for pulp options and futures on September 9 in Helsinki – the first of its kind.

OM stressed it had been evolving its plans for three years and had received backing from several large Norscan companies. Mr Marcus Hamberg, vice president for commodities, said the group would also seek to involve southern hemisphere producers. "Price volatility has increased and the gaps between the ups and downs have been getting wider and wider. This obviously constitutes a vast problem for the industry," he said.

Mr Hamberg predicted that the derivatives would steady the forestry business cycle and facilitate financing of pulp capacity increases by enabling producers to assess forward prices.

The new market will based on northern bleached softwood kraft (NBSK), an industry benchmark. OM believes NBSK's close price correlation with hardwood bleached softwood kraft will also allow trades in that grade. World production of paper and pulp is about 200m tonnes annually, of which some 40m tonnes is traded on the spot market.

In contrast with the Helsinki system, where settlement will be in cash, OM transactions are to be based on physical delivery – as is customary in commodities trading.

OM said the market price would be determined by participants and it would soon start recruiting market makers from among London's investment banking community.

Fish oil producers' group hits back at Greenpeace campaign

By Deborah Hargreaves

Fish oil producers yesterday hit out at a campaign by Greenpeace, the environmental group, against "industrial" fishing in the North Sea, saying it had got its facts wrong.

Mr Stuart Barlow, director general of Ifoma, the International Fishmeal and Oil Manufacturers Association, said independent scientific reports had found that stocks of sandeels in the North Sea, which are used to produce fish oil were "abundant".

"This is not a Hoovering operation," he said. "We are using standard nets and there is very little by-catch included." By-catches happen when nets trap other species than those required, and these are later discarded.

Fish oil producers are concerned about a campaign launched by environmental groups to encourage companies to use oils such as palm oil or soya oil rather than fish oil.

Unilever, the large consumer goods group, which takes about 20 per cent of the fish oil produced from the North Sea, said earlier this year it would stop using fish oil derived from "industrial" fishing.

"We are very much concerned by the fact that companies are currently reviewing their sources of fish oil. We don't want a bad image and now we have the scientific evidence to back up our claims," said Mr Barlow.

Greenpeace said, however, that Ifoma was taking a view of the North Sea as a whole and not looking at particularly sensitive areas such as the east coast of Scotland.

"We want some limitations in place on exploiting stocks of sandeels in the North Sea – there is currently no regulation at all," said Mr Phil Aikman, fisheries campaigner.

He said that the same scientists who had been quoted by Ifoma to back its claims had said that the assessment of the sandeel stock was imprecise.

Hindustan Copper wants to close unprofitable mines

By Kunal Bose in Calcutta

Hindustan Copper is planning to close its highly unprofitable mines at Kendadih and Rakha in the Singhbhum district of Bihar, a state in the east of the country. "The mines there are such a drag on the company that we will be seeking the permission of the state and the federal government to stop working there," Mr L Prasad, director (operations), said this week.

Whatever its losses, however, the company recognises that it faces an uphill battle to get government permission for the move as the mines' closure would directly affect nearly 6,000 families, including 1,800 tribal families.

The crisis would never have arisen had Hindustan Copper, a federal government undertaking, been able to secure a lease on land in the same belt from the state government for developing new mines, in which the surplus workers would have found employment.

The Kendadih and Rakha mines were opened in 1924.

"We are now doing mining at a depth of over 1,230m," said Mr Prasad. "The mines are so deep that we are required to hoist copper ore in three stages. These mines are the second deepest in the country after the Kolar gold mines. We should have moved to new sites a long time ago."

The cost of producing a tonne of metal in concentrate at the Kendadih and Rakha mines has risen to Rs138,000 ($3,887), compared with Rs51,000 at Hindustan Copper's Malanjkhand complex in Madhya Pradesh and Rs72,000 at the Khetri complex in Rajasthan.

According to Mr Prasad, the copper content of the Kendadih and Rakha ore is only 0.98 per cent, and its contains very little precious metal.

Last year, Hindustan Copper raised 1.06m tonnes of ore at the two mines; and the company's 16,500-tonne-a-year smelter at Maubhandar in Singhbhum district depends partly on the concentrate produced from their ore. The smelter, where annual capacity is to be raised to 31,000 tonnes also uses concentrate from the Malanjkhand complex. Hindustan Copper also owns a 31,000-tonne smelter at Khetri.

Mr Prasad said that while the company would try to convince the Bihar government to release land on a long-term lease, it would ask the federal government to provide funds for the development of new mines.

It has also decided to open a new underground mine at Malanjkhand with ore raising capacity of 2m tonnes to 5m tonnes a year as a joint venture with a foreign company.

"We have identified ore deposits of over 150m tonnes with a copper content of 1.3 per cent," said a company official. "Developing the mine at a depth of around 376m will cost between Rs5bn and Rs10bn. It is a capital intensive project and we need a foreign partner."

The company also wants a foreign partner to develop an underground mine at Chapri-Siddheswar in Singhbhum district where there is a deposit of 60m tonnes with a copper content of 1.3 per cent.

"An investment of about Rs5bn will be needed to raise 1.5m tonnes of ore a year," said the official.

COMMODITIES PRICES

BASE METALS

LONDON METAL EXCHANGE (Prices from Amalgamated Metal Trading)

■ ALUMINIUM, 99.7 PURITY ($ per tonne)

	Cash	3 mths
Close	1462.5-3.5	1496-7
Previous	1449-50	1484.5-85.5
High/low		1500/1483
AM Official	1447-7.5	1483-3.5
Kerb close		1496-7
Open int.	215,025	
Total daily turnover	39,103	

■ ALUMINIUM ALLOY ($ per tonne)

Close	1257-62	1292-4
Previous	1248-53	1283-88
High/low		1296/1292
AM Official	1251-2	1285-5.5
Kerb close		1296-7
Open int	4,995	
Total daily turnover	1,524	

■ LEAD ($ per tonne)

Close	803.5-4.5	805.5-6.0
Previous	802-3	803-4
High/low	802/801.5	807/804
AM Official	801.5-2.0	804-5
Kerb close		804.5-5.0
Open int	33,026	
Total daily turnover	6,919	

■ NICKEL ($ per tonne)

Close	7300-10	7400-05
Previous	7245-55	7345-50
High/low	7240	7430/7345
AM Official	7245-50	7345-50
Kerb close		7420-30
Open int	37,214	
Total daily turnover	10,599	

■ TIN ($ per tonne)

Close	6155-65	6215-20
Previous	6115-25	6175-80
High/low		6220/6170
AM Official	6120-30	6175-80
Kerb close		6220-25
Open int	13,954	
Total daily turnover	3,659	

■ ZINC, special high grade ($ per tonne)

Close	1003-4	1028.5-9.0
Previous	999-1000	1025-26
High/low	1000	1030/1026
AM Official	1000-0.5	1026-7
Kerb close		1029-9.5
Open int	64,933	
Total daily turnover	14,040	

■ COPPER, grade A ($ per tonne)

Close	2003-6	1957.5-8.0
Previous	1975-77	1943-44
High/low	1986	1964/1943
AM Official	1987-8	1945.5-6.0
Kerb close		1959-60
Open int	199,707	
Total daily turnover	56,945	

■ LME AM Official £/$ rate: 1.5580
LME Closing £/$ rate: 1.5585
Spot: 1.5563 3 mths: 1.5557 6 mths: 1.5565 9 mths: 1.5574

■ HIGH GRADE COPPER (COMEX)

	Sett price	Day's change	High	Low	Vol	Open int
Sep	91.50	+0.45	92.80	91.20	3,641	8,617
Oct	91.20	+0.25	91.90	91.20	35	1,954
Nov	91.00	+0.40	91.40	91.10	11	1,348
Dec	90.70	+0.50	91.60	90.20	2,989	22,456
Jan	90.10	+0.40	90.50	90.20	20	989
Feb	89.50	+0.30	89.60	89.50	31	789
Total					7,890	54,962

PRECIOUS METALS

■ LONDON BULLION MARKET (Prices supplied by N M Rothschild)

Gold(Troy oz)	$ price	£ equiv	SFr equiv
Close	387.90-388.20		
Opening	388.10-388.40		
Morning fix	388.05	248.788	462.982
Afternoon fix	388.00	249.181	464.203
Day's High	388.20-388.50		
Day's Low	387.90-388.10		
Previous close	388.35-388.65		

Loco Ldn Mean Gold Lending Rates (Vs US$)

1 month	4.40	6 months	4.05
2 months	4.40	12 months	4.07
3 months	4.38		

Silver Fix	p/troy oz.	US cts equiv.
Spot	332.35	518.00
3 months	336.70	524.55
6 months	340.60	531.00
1 year	349.30	545.05

Gold Coins	$ price	£ equiv.
Krugerrand	397-400	254-256
Maple Leaf	397.40-399.90	
New Sovereign	86-90	55-57

Precious Metals continued

■ GOLD COMEX (100 Troy oz.; $/troy oz.)

	Sett price	Day's change	High	Low	Vol	Open int
Sep	388.3	-0.6	-	-	2	2
Oct	389.4	-0.6	390.2	388.8	401	10,523
Dec	392.4	-0.6	393.2	391.7	13,611	74,427
Feb	394.5	-0.5	395.1	394.2	26	12,589
Apr	397.5	-0.5	397.9	397.1	17	5,998
Jun	400.1	-0.5	401.4	401.1	15	11,880
Total					14,223	160,179

■ PLATINUM NYMEX (50 Troy oz.; $/troy oz.)

Oct	400.6	-2.4	402.8	399.5	1,754	18,250
Jan	402.9	-2.3	405.0	402.0	669	3,568
Apr	405.2	-2.3	407.0	405.0	202	3,324
Jul	408.0	-2.3	-	-	50	272
Oct	411.5	-2.3	413.8	413.8	8	2
Total					2,642	25,416

■ PALLADIUM NYMEX (100 Troy oz.; $/troy oz.)

Sep	128.10	-1.10	127.50	126.00	345	2,092
Dec	127.50	-0.65	128.50	127.60	363	6,590
Mar	128.40	-0.65	128.50	128.50	63	173
Jun	129.45	-0.65	129.00	129.00	-	109
Total					902	8,964

■ SILVER COMEX (5,000 Troy oz.; Cents/troy oz.)

Sep	517.5	+0.3	518.0	515.5	12,802	12,645
Oct	520.2	+0.4	[illegible]	[illegible]	[illegible]	24
Dec	525.5	+0.4	527.0	523.5	15,671	55,483
Jan	528.6	+0.4	528.0	528.0	57	23
Mar	533.5	+0.4	535.0	532.0	221	9,614
May	538.5	+0.2	539.5	539.5	25	5,545
Total					29,888	92,044

ENERGY

■ CRUDE OIL NYMEX (1,000 barrels, $/barrel)

	Latest price	Day's change	High	Low	Vol	Open int
Oct	22.23	+0.52	22.32	21.67	42,895	85,091
Nov	21.69	+0.48	21.75	21.23	13,682	39,659
Dec	21.24	+0.47	21.25	20.80	8,271	44,716
Jan	20.80	+0.43	20.80	20.54	5,157	30,959
Feb	20.40	+0.39	20.40	20.17	2,373	22,422
Mar	19.97	+0.23	20.03	19.83	872	13,698
Total					77,128	384,270

■ CRUDE OIL IPE ($/barrel)

	Latest price	Day's change	High	Low	Vol	Open int
Oct	20.75	+0.48	20.84	20.38	15,514	65,793
Nov	20.30	+0.45	20.35	19.99	7,869	22,395
Dec	19.85	+0.40	19.90	19.60	5,057	20,983
Jan	19.49	+0.40	19.50	19.24	2,166	14,124
Feb	19.08	+0.35	19.16	18.87	248	7,064
Mar	18.80	+0.41	18.80	18.53	442	7,329
Total					n/a	n/a

■ HEATING OIL NYMEX (42,000 US galls.; c/US galls.)

	Latest price	Day's change	High	Low	Vol	Open int
Sep	63.30	+1.26	63.75	62.15	10,702	13,711
Oct	63.25	+1.23	63.65	61.95	12,504	32,042
Nov	63.05	+1.18	63.35	61.95	2,764	14,762
Dec	62.90	+1.23	63.15	61.80	3,295	26,155
Jan	62.20	+1.03	62.40	61.40	1,588	14,129
Feb	60.50	+0.93	60.70	59.80	1,130	7,829
Total					33,992	124,879

■ GAS OIL IPE ($/tonne)

	Sett price	Day's change	High	Low	Vol	Open int
Sep	186.75	+5.00	186.50	181.75	8,752	23,685
Oct	184.25	+4.50	185.00	180.25	4,890	14,072
Nov	181.25	+3.75	181.50	177.75	2,133	8,441
Dec	180.50	+3.00	180.50	176.25	1,624	14,919
Jan	180.00	+2.25	180.50	176.25	553	6,834
Feb	180.00	+2.00	180.50	177.50	331	1,316
Total						79,182

■ NATURAL GAS NYMEX (10,000 mmBtu; $/mmBtu)

	Latest price	Day's change	High	Low	Vol	Open int
Oct	1.890	+0.025	1.920	1.850	13,555	22,794
Nov	2.040	+0.025	2.060	1.995	3,531	14,930
Dec	2.170	+0.020	2.180	2.130	1,908	16,005
Jan	2.215	+0.022	2.222	2.175	1,044	13,623
Feb	2.145	+0.013	2.155	2.120	616	7,557
Mar	2.075	+0.015	2.085	2.050	544	5,936
Total					23,920	126,713

■ UNLEADED GASOLINE NYMEX (42,000 US galls.; c/US galls.)

	Latest price	Day's change	High	Low	Vol	Open int
Sep	63.80	+1.47	64.30	62.33	11,533	12,172
Oct	61.50	+0.58	62.25	61.00	10,222	23,279
Nov	60.40	+0.83	60.60	60.00	2,372	8,476
Dec	59.10	+0.68	59.30	58.90	618	4,501
Jan	58.20	+0.53	58.25	58.10	253	4,595
Feb	57.50	+0.28	57.60	57.60	428	1,852
Total					26,803	57,648

GRAINS AND OIL SEEDS

■ WHEAT LCE (£ per tonne)

	Sett price	Day's change	High	Low	Vol	Open int
Sep	109.25	+0.10	109.50	109.35	33	178
Nov	110.80	-0.20	111.10	110.45	201	2,918
Jan	112.80	-0.20	113.00	112.50	104	1,652
Mar	114.75	-0.25	115.00	114.50	52	931
May	116.70	-0.30	117.00	116.50	32	643
Jul	118.40	-0.10	115.75	115.75	-	67
Total					422	6,389

■ WHEAT CBT (5,000bu min; cents/60lb bushel)

Sep	451.25	-	453.00	446.00	3,561	10,315
Dec	456.00	+1	458.25	451.00	12,754	39,720
Mar	452.00	-0.5	455.50	449.00	1,160	9,071
May	433.00	+3	434.00	429.00	63	419
Jul	403.25	+4.25	403.50	399.00	125	3,813
Sep	405.00	+3	407.00	407.00	10	42
Total					17,673	63,299

■ MAIZE CBT (5,000 bu min; cents/56lb bushel)

Sep	370.50	+2.75	371.50	364.50	15,077	31,791
Dec	344.50	+1.75	345.50	341.25	40,162	184,294
Mar	351.50	+1.75	352.00	348.00	3,987	41,773
May	357.00	+1.75	357.75	354.25	904	14,435
Jul	355.75	+1.5	357.00	353.50	701	11,609
Sep	318.00	+1	318.00	317.50	204	1,314
Total					61,407	293,409

■ BARLEY LCE (£ per tonne)

Sep	101.00	+0.70	-	-	-	61
Nov	103.65	+0.40	103.75	102.75	40	974
Jan	106.50	+0.60	106.50	106.00	23	510
Mar	108.65	+0.90	-	-	-	157
May	110.50	+1.00	-	-	-	65
Total					63	1,767

■ SOYABEANS CBT (5,000bu min; cents/60lb bushel)

Sep	819.25	+2.25	823.00	813.00	3,184	8,980
Nov	795.00	+6.25	797.50	787.25	47,197	124,631
Jan	801.75	+6.25	804.00	793.25	3,355	21,342
Mar	806.00	+5.5	807.50	799.00	1,715	13,083
May	805.50	+6	807.00	797.00	1,262	11,470
Jul	805.00	+7	807.50	799.00	824	8,267
Total					57,988	191,889

■ SOYABEAN OIL CBT (60,000lbs; cents/lb)

Sep	25.18	+0.07	25.40	25.03	6,226	8,782
Oct	25.41	+0.1	25.58	25.22	4,270	15,027
Dec	25.80	+0.06	26.02	25.63	8,794	38,205
Jan	26.02	+0.05	26.20	25.90	319	6,771
Mar	26.38	+0.05	26.58	26.27	479	5,812
May	26.74	+0.09	26.90	26.60	191	3,935
Total					21,386	80,083

■ SOYABEAN MEAL CBT (100 tons; $/ton)

Sep	268.6	+4.4	267.0	261.8	10,350	18,608
Oct	258.2	+3.6	258.4	254.2	5,376	14,874
Dec	253.8	+3.4	253.9	250.1	11,360	36,301
Jan	251.8	+3.6	252.0	248.0	1,142	6,872
Mar	250.3	+3.9	250.0	246.3	1,342	6,148
May	247.2	+4	247.0	243.5	764	5,106
Total					30,885	80,027

■ POTATOES LCE (£/tonne)

Nov	72.5	-	-	-	-	-
Mar	75.0	-	-	-	-	-
Apr	78.3	-2.0	80.0	78.0	72	1,181
May	85.0	-2.0	-	-	-	15
Jun	85.0	-	-	-	-	-
Total					72	1,198

■ FREIGHT (BIFFEX) LCE ($10/index point)

Aug	1113	-2	-	-	-	773
Sep	1143	+1	1151	1130	115	867
Oct	1260	+25	1261	1225	226	1,533
Jan	1280	+14	1280	1280	3	770
Apr	1288	+5	1278	1278	10	246
Jul	1138	-	-	-	-	27
Total					364	4,251

	Close	Prev
BFI	1110	1116

FUTURES DATA
All futures data supplied by CMS.

Tea
There was again a rise of just 1 cent in Australia's Eastern market indicator this week, bringing it to 615 cents a kg. New Zealand's main market indicator was 8 cents up at 480 cents. In both major primary markets there was a contract between finer merinos and the rest. Fine and superfine merinos typically show more price volatility and have for some months been seen as on a recovery trend after a period of depression. This continued when sales were resumed in the new wool selling season and limited offerings led to acceleration this week. Other wools sold steadily but prices were no more than steady and sometimes a fraction easier. The usual impression given by commentators is that the balance between supply and demand has been better in the world trade.

SOFTS

■ COCOA LCE (£/tonne)

	Sett price	Day's change	High	Low	Vol	Open int
Sep	957	-12	975	955	690	35,480
Dec	986	-5	989	977	3,264	38,955
Mar	1004	-	1013	996	2,072	42,420
May	1019	+1	1027	1012	1,093	21,927
Jul	1035	+1	1044	1028	638	11,678
Sep	1051	-	1056	1050	226	3,632
Total					8,281	171,333

■ COCOA CSCE (10 tonnes; $/tonnes)

Sep	1323	-8	1336	1323	41	215
Dec	1363	-8	1370	1358	6,500	31,846
Mar	1395	-10	1401	1391	797	17,342
May	1416	-5	1422	1411	211	8,030
Jul	1430	-10	1435	1430	25	5,976
Sep	1451	-4	1458	1455	86	5,476
Total					7,720	77,845

■ COCOA (ICCO) (SDR's/tonne)

Aug 28	Price	Prev. day
Daily	1015.05	1017.54

■ COFFEE LCE ($/tonne)

Sep	1663	-3	1667	1651	1,146	4,716
Nov	1619	-13	1630	1615	1,771	13,845
Jan	1584	-9	1593	1577	467	4,760
Mar	1552	-8	1583	1545	626	2,764
May	1537	-6	1545	1530	55	514
Jul	1518	-12	1535	1535	-	168
Total					4,089	26,765

■ COFFEE 'C' CSCE (37,500lbs; cents/lbs)

Sep	128.10	+0.80	128.50	127.10	364	1,397
Dec	117.05	+0.50	117.60	115.20	7,840	18,883
Mar	111.55	+0.65	111.90	109.50	942	5,280
May	111.50	+0.50	111.50	109.80	131	1,783
Jul	110.75	-	110.50	109.75	10	468
Sep	110.75	-	111.25	108.50	30	170
Total					9,307	28,159

■ COFFEE (ICO) (US cents/pound)

Aug 29	Price	Prev. day
Comp. daily	104.00	107.03
15 day average	104.21	103.82

■ WHITE SUGAR LCE ($/tonne)

Oct	348.2	-0.8	349.5	348.0	1,788	8,353
Dec	343.6	-0.6	345.5	343.6	322	4,740
Mar	338.8	+0.1	340.3	338.8	849	7,011
May	336.0	+0.6	337.0	335.7	186	2,950
Aug	334.5	+0.2	335.0	334.3	19	1,107
Oct	325.8	-	327.0	325.5	-	1,087
Total					3,148	28,404

■ SUGAR '11' CSCE (112,000lbs; cents/lbs)

Oct	11.73	-	11.77	11.65	2,778	70,207
Mar	11.38	-0.01	11.42	11.34	1,870	47,238
May	11.20	-	11.22	11.16	837	18,244
Jul	10.86	+0.03	10.86	10.85	598	13,204
Oct	10.71	+0.02	10.72	10.70	638	8,290
Mar	10.52	+0.02	10.51	10.51	250	951
Total					6,771	158,338

■ COTTON NYCE (50,000lbs; cents/lbs)

Oct	76.32	+1.01	76.40	75.20	970	6,591
Dec	77.06	+0.95	77.34	76.15	8,138	28,852
Mar	78.33	+1.02	78.40	77.25	719	8,098
May	79.00	+1.20	79.00	77.70	416	6,157
Jul	79.40	+0.87	79.60	78.45	221	4,547
Oct	78.20	+0.70	78.15	77.80	35	1,000
Total					10,823	58,859

■ ORANGE JUICE NYCE (15,000lbs; cents/lbs)

Sep	119.65	-0.70	120.75	119.50	1,456	3,596
Nov	114.75	+0.45	115.35	114.10	1,004	8,567
Jan	114.08	+0.55	114.30	113.50	141	4,997
Mar	115.00	+0.60	115.20	114.00	27	1,390
May	116.25	+1.05	116.25	115.50	35	385
Jul	117.00	+1.05	116.00	116.00	10	193
Total					2,673	19,436

VOLUME DATA
Open interest and Volume data shown for contracts traded on COMEX, NYMEX, CBT, NYCE, CME, CSCE and IPE Crude Oil are one day in arrears. Volume & Open interest totals are for all traded months.

INDICES

■ REUTERS (Base: 18/9/31=100)

Aug 29	Aug 28	month ago	year ago
1944.4	1952.1	1935.1	2222.4

■ CRB Futures (Base: 1967=100)

Aug 28	Aug 27	month ago	year ago
	249.76	-	-

■ GSCI Spot (Base: 1970=100)

Aug 28	Aug 27	month ago	year ago
196.52	198.70	192.52	176.98

MEAT AND LIVESTOCK

■ LIVE CATTLE CME (40,000lbs; cents/lbs)

	Sett Price	Day's change	High	Low	Vol	Open int
Oct	71.875	+0.375	71.975	71.175	3,834	42,387
Dec	67.950	+0.15	68.000	67.500	2,619	23,573
Feb	65.425	-0.125	65.650	65.250	898	14,824
Apr	66.975	-	67.050	66.750	411	5,136
Jun	64.900	-0.025	64.975	64.700	244	2,652
Aug	65.050	-0.05	65.150	65.000	153	2,663
Total					8,159	91,236

■ LIVE HOGS CME (40,000lbs; cents/lbs)

Oct	52.400	-0.775	53.150	52.250	2,867	13,080
Dec	53.150	-0.05	53.350	52.750	2,759	10,648
Feb	74.025	-0.55	74.400	73.700	514	3,758
Apr	71.900	-0.575	72.400	71.800	84	1,545
Jun	76.925	-0.75	77.300	76.700	75	1,465
Jul	75.100	-0.5	75.000	74.950	13	280
Total					6,316	31,004

■ PORK BELLIES CME (40,000lbs; cents/lbs)

Feb	80.050	-2	80.050	80.050	1,429	4,921
Mar	79.625	-2	79.900	79.625	79	893
May	79.000	-2	79.600	79.000	34	308
Jul	79.500	-2	79.800	79.600	37	70
Aug	77.400	-2	79.400	79.400	11	18
Total					1,549	6,286

LONDON TRADED OPTIONS

Strike price $ tonne — Calls — — Puts —

■ ALUMINIUM (99.7%) LME	Sep	Dec	Sep	Dec
1400	86	133	3	17
1500	20	69	36	50
1600	3	29	118	109
■ COPPER (Grade A) LME	**Sep**	**Dec**	**Sep**	**Dec**
1900	101	117	22	76
2000	44	72	64	128
2100	15	42	134	196
■ COFFEE LCE	**Sep**	**Nov**	**Sep**	**Nov**
1600	90	108	71	124
1650	68	89	99	155
1700	50	73	131	189
■ COCOA LCE	**Sep**	**Dec**	**Sep**	**Dec**
975	52	69	41	40
1000	41	55	55	51
1025	31	46	70	66
■ BRENT CRUDE IPE	**Oct**	**Nov**	**Oct**	**Nov**
2000	-	-	23	-
2050	55	71	36	-
2100	-	-	-	-

LONDON SPOT MARKETS

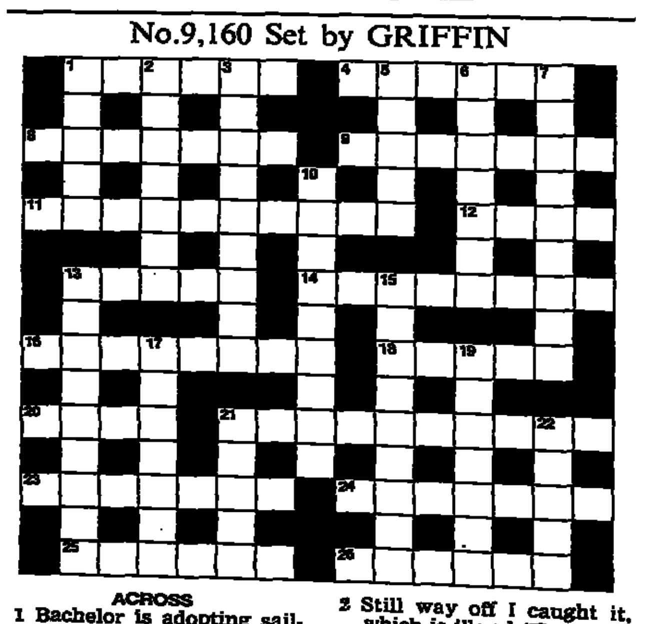
■ CRUDE OIL FOB (per barrel)		+or-
Dubai	$19.12-9.22	+0.315
Brent Blend (dated)	$20.94-1.01	+0.385
Brent Blend (Oct)	$20.68-0.72	+0.28
W.T.I.	$22.21-2.23x	+0.265
■ OIL PRODUCTS NWE prompt delivery CIF (tonne)		
Premium Gasoline	$219-221	+3
Gas Oil	$198-199	+5
Heavy Fuel Oil	$100-102	
Naphtha	$197-199	+1
Jet fuel	$228-229	+5
Diesel	$201-202	+6
■ NATURAL GAS (Pence/therm)		
Bacton (Sep)	14.65-14.85	-0.045
Petroleum Argus. Tel. London (0171) 359 8792		
■ OTHER		
Gold (per troy oz)♣	$388.05	-0.45
Silver (per troy oz)♣	521.00c	+1.00
Platinum (per troy oz.)	$398.50	-1.50
Palladium (per troy oz.)	$128.00	+0.75
Copper	98.0c	
Lead (US prod.)	45.00c	
Tin (Kuala Lumpur)	15.03r	-0.03
Tin (New York)	287.50	
Cattle (live weight)	93.24p	-2.80*
Sheep (live weight)	114.18p	-0.13*
Pigs (live weight)†	101.46p	-4.54*
Lon. day sugar (raw)	$305.50	-2.50
Lon. day sugar (wte)	$369.00	-1.30
Barley (Eng. feed)	Unq	
Maize (US No3 Yellow)	$141.5v	
Wheat (US Dark North)	Unq	
Rubber (Oct)♥	88.00p	
Rubber (Nov)♥	88.00p	
Rubber (KL RSS No1)	328.50m	
Coconut Oil (Phil)§	$760.0w	
Palm Oil (Malay.)§	$550.0z	-5.0
Copra (Phil)§	$472.0z	-14.0
Soyabeans (US)	225.0	-2.0
Cotton Outlook'A' index	74.95	
Wooltops (64s Super)	428p	

£ per tonne unless otherwise stated. p pence/kg. c cents/lb. r ringgit/kg. m Malaysian cents/kg. v Sep. x Oct. w Jul/Aug. z Aug/Sep ♥ London Physical. § CIF Rotterdam. ♣ Bullion market close. * Change on week. †Based on 1,568 head of pigs sold.

JOTTER PAD

CROSSWORD

No.9,160 Set by GRIFFIN



ACROSS
1 Bachelor is adopting sailors' children (6)
4 Man on board speaking of when it's dark (6)
8 On corner half of cars will be people using bank (7)
9 Peeled end off after moving sink (7)
11 Financial Director admits excessive politeness on note worked. (10)
12 Regretted blushing when embracing you, say (4)
13 Thinks highly of artist and backing group (5)
14 Rejected article on about staff of Emperor (8)
16 Drunk lager, reckoning it's a big amount (5,3)
18 Stick a little cottage by the gates (5)
20 Which reveals affection Jack is supposed to conceal (4)
21 Checked which diners were consuming a brown rodent. (10)
23 Stout aunt's upset companion (7)
24 Refrain from getting a black mark (7)
25 Found note in packing case (6)
26 Deliver secure buckles (6)

DOWN
1 But wrong about a North African language? (5)
2 Still way off I caught it, which is illegal (7)
3 New cars in South American plant (9)
5 Out of gear? (5)
6 Classes left to an army officer (7)
7 As a result the soldiers get a warning shout (9)
10 Soon heard why doctor wants us unidentified (9)
13 Article is unusually sensible (9)
15 Tasty US city food father wanted first (9)
17 Handy way to make your requirements known? (7)
19 Needing doctor as twitch is severe (7)
21 Pink paper one immersed comes to surface (5)
22 Pick the foreign site but not at first (5)

Solution 9,159

صكنا من الاصل

FT MANAGED FUNDS SERVICE

● FT Cityline Unit Trust Prices are available over the telephone. Call the FT Cityline Help Desk on (+44 171) 873 4378 for more details.

OFFSHORE AND OVERSEAS

BERMUDA (SIB RECOGNISED)

Fidelity Currency Funds Ltd

Pembroke Hall, Pembroke, Bermuda
UK: Fini Advisers 0800 414181 — Jersey: 01534 71696
Private Clients 0800 414161 — 00 352 250404286
From O'seas (44) 1732 777377 — Hong Kong (852) 848 1000

	Selling Price	+or-	Yield Gr's
A$ Accum	A$18.964	+0.002	5.00
ASch Accum	Sch248.22	+0.02	2.20
C$ Accum	C$18.824	+0.007	3.30
DM Accum	DM38.217	+0.002	2.10
DFl Accum	Dfl31.588	+0.002	1.80
ECU Accum	Ecu13.437	+0.001	3.20
FFr Accum	FFr66.804	+0.005	2.80
HK$ Accum	HK$120.88	+0.02	4.30
Lira Accum	L23073	+5	8.00
NZ$ Accum	NZ$30.437	+0.009	8.90
NKr Accum	NKr111.88	+0.01	3.40
S$ Accum	S$30.958	+0.002	2.40
SPta Accum	Pta2713.1	+0.4	6.40
£ Accum	£13.046	+0.002	4.70
SKr Accum	SKr120.48	+0.02	4.10
SFr Accum	SFr29.364	+0.001	1.10
US$ Accum	$23.379	+0.010	4.40
Yen Accum	Y2896.0	—	0.10

Prices for dealing August 29

Jupiter Tyndall (Bermuda) Ltd

PO Box HM1258, Hamilton, Bermuda 001 809 292 2780
Jupiter Tyndall World Umbrella Fund Ltd

	Selling Price	Buying Price	+or-	Yield Gr's
Eurobond	$15.74	16.54	-0.02	3.42
Money (t)	$14.15	14.87	+0.01	2.58
Mortgage (z)	C$23.51	24.68	+0.02	7.43
North American	$14.07	14.78	+0.21	-

Lloyds Int'l Money Market Fund Ltd

Sarnia Hse, Le Truchot, St Peter Port 01481 724983
Lloyds Bank Fund Managers (Guernsey) Ltd

	Selling Price	+or-	Yield Gr's
Australian Dollar	A$55.9800	+0.0149	6.162
Canadian Dollar	C$29.5060	+0.0039	3.306
Deutschmarks	DM69.3900	+0.0080	2.307
Dutch Guilders	Dfl58.9010	+0.0020	1.871
ECU's	Ecu38.6240	+0.0030	3.476
French Francs	FFr197.5820	+0.0159	2.776
Italian Lira	L26305.7440	+5.8460	8.242
Japanese Yen	Y3400.5460	+0.0000	0.098
New Zealand Dollar	NZ$65.1940	+0.0230	8.189
Norwegian Kroner	NKr182.2370	+0.0000	3.586
Portuguese Escudos	Esc3735.7160	+0.0460	6.441
Spanish Pesetas	Pta5590.7330	+0.0370	6.734
Sterling Class	£38.7470	+0.0050	4.807
Swedish Kronor	SKr105.9330	+0.0120	4.381
Swiss Francs	SFr80.8210	+0.0000	1.495
US Dollar Class	$41.8530	+0.0050	4.558
Managed Sterling	£19.3240	+0.0020	4.861
Managed US$	$25.5440	+0.0000	4.262

Dealing daily

M & G (Guernsey) Ltd

Westbourne, The Grange, St Peter Port 01481 722983

	Selling Price	Buying Price	+or-	Yield Gr's
Island Global Fd	7844.9	7955.6	-4.7	0.91
Island Gold	4568.3	4874.2	+21.4	-0.07
(Accum. Units)	8758.4	9289.9	+48.8	-0.07
Island UK Fd	1036	1100.3	-1	3.45
(Accum Units)	2500.2	2650.2	-2.5	3.45

Prudential Fund Managers (Guernsey) Ltd

PO Box 61, St Peter Port, Guernsey 01481 707000
Prudential Money Funds Ltd

	Selling Price	Buying Price	+or-	Yield Gr's
Managed Sterling	158.7	158.8	-0.2	4.00
Managed Dollar	$14.47	14.48	-0.01	3.76
Dollar Deposit	$10.12	10.13	—	3.77

Rothschild Asset Management (CI) Ltd

PO Box 242, St Peter Port, Guernsey 01481 719742/3

BERMUDA (REGULATED)(**)

GUERNSEY (SIB RECOGNISED)

GUERNSEY (REGULATED)(**)

IRELAND (SIB RECOGNISED)

IRELAND (REGULATED)(**)

ISLE OF MAN (SIB RECOGNISED)

ISLE OF MAN (REGULATED)(**)

JERSEY (SIB RECOGNISED)

JERSEY (REGULATED)(**)

Odey Asset Management Ltd

80 Harcourt Street, Dublin 2 00 3531 790 2400

	Selling Price	+or-	Yield Gr's
Odey European Gth Inc	DM154.28	—	-
Odey European Gth Acc	DM154.29	—	-
Odey European Gth Inc	£67.03	—	-
Odey European Gth Acc	£67.23	—	-

Baring Mutual (Ireland) Ltd

	Selling Price	Buying Price	+or-	Yield Gross
Umbrella Fixed Inc	$12.60	12.98	—	5.84
Greater America Fund '92	$68.74		—	0.00
Pacific Emerging 94 A	$65.98		—	0.00
Pacific Emerging 94 B	$62.77		—	0.00
Latin America	$07.87		+0.01	0.00

Berkshire KITC Growth Fund Plc

	Selling Price	+or-	Yield Gross
NAV	$8.10	-1.91	-

Berkshire Korea Fund Plc

	Selling Price	+or-	Yield Gross
NAV	$4.72	-0.06	-

Blackstone Franks Managers Ireland Ltd

	Selling Price	Buying Price	+or-	Yield Gross
Blackstone Franks International Bond	£9.92	10.34	—	-

Old Mutual International Fd Mngrs Ltd (u)

9/11 Lower Mount Street, Dublin 2, Ireland 00 3531 662 1555

	Selling Price	+or-	Yield Gr's
OMI Galileo Euro Stmkt	$1.394	+0.005	0.00
OMI Galileo Em Asia Eq	$0.899	+0.001	0.00
OMI Galileo Emer Mkt Bd	$1.132	—	8.31
OMI Galileo Emer Mkt Eq	$1.080	+0.002	0.00
OMI Galileo Glbl Mgd	$1.338	-0.003	0.00
OMI Galileo Glbl Spec Mkt	$1.308	-0.003	0.00
OMI Galileo Glbl Fixed Inc	$1.084	+0.001	5.13
OMI Galileo Hong Kong Stmkt	$1.014	-0.005	0.00

Bordier Invest (Ireland) Ltd

Offshore Funds and Insurances

FT MANAGED FUNDS SERVICE

● FT Cityline Unit Trust Prices are available over the telephone. Call the FT Cityline Help Desk on (+44 171) 873 4378 for more details.

LUXEMBOURG (SIB RECOGNISED)

LUXEMBOURG (REGULATED)(**)

OFFSHORE INSURANCES

هكذا من الأصل

FT MANAGED FUNDS SERVICE

Offshore Insurances and Other Funds

● FT Cityline Unit Trust Prices are available over the telephone. Call the FT Cityline Help Desk on (+44 171) 873 4378 for more details.

[illegible]

[illegible]

OTHER OFFSHORE FUNDS

[illegible]

● MANAGED FUNDS NOTES

[illegible]

LONDON SHARE SERVICE

ALCOHOLIC BEVERAGES

BANKS, MERCHANT

BANKS, RETAIL

BREWERIES, PUBS & REST

BUILDING & CONSTRUCTION

BUILDING MATS. & MERCHANTS

CHEMICALS

CHEMICALS - Cont.

DISTRIBUTORS

DIVERSIFIED INDUSTRIALS

ELECTRICITY

ELECTRONIC & ELECTRICAL EQPT

ELECTRONIC & ELECTRICAL EQPT - Cont.

ENGINEERING

ENGINEERING - Cont.

ENGINEERING, VEHICLES

EXTRACTIVE INDUSTRIES

EXTRACTIVE INDUSTRIES - Cont.

FOOD PRODUCERS

FOOD PRODUCERS - Cont.

GAS DISTRIBUTION

HEALTH CARE

HOUSEHOLD GOODS

HOUSEHOLD GOODS - Cont.

INSURANCE

INVESTMENT TRUSTS

INVESTMENT TRUSTS - Cont.

INV TRUSTS SPLIT CAPITAL

هكذا من الاصل

LONDON SHARE SERVICE

INV TRUSTS SPLIT CAPITAL - Cont.

[illegible]

OTHER INVESTMENT TRUSTS

[illegible]

INVESTMENT COMPANIES

[illegible]

LEISURE & HOTELS

[illegible]

LEISURE & HOTELS - Cont.

[illegible]

LIFE ASSURANCE

[illegible]

MEDIA

[illegible]

OIL EXPLORATION & PRODUCTION

[illegible]

OIL, INTEGRATED

[illegible]

OTHER FINANCIAL

[illegible]

PAPER, PACKAGING & PRINTING

[illegible]

PHARMACEUTICALS

[illegible]

PROPERTY

[illegible]

PROPERTY - Cont.

[illegible]

RETAILERS, FOOD

[illegible]

RETAILERS, GENERAL

[illegible]

SUPPORT SERVICES

[illegible]

TELECOMMUNICATIONS

[illegible]

TEXTILES & APPAREL

[illegible]

TOBACCO

[illegible]

TRANSPORT

[illegible]

WATER

[illegible]

AIM

[illegible]

AIM - Cont.

[illegible]

AMERICANS

[illegible]

CANADIANS

[illegible]

SOUTH AFRICANS

	Notes	Price	+ or –	52 week high	52 week low	Mkt Cap£m	Yld Gr's	P/E
Anglo Am Ind		£22½	—	£34½	£22½	1,503	3.5	Φ
Barlow	♣†	559	—	£10⅞	£5⅝	1,355	2.3	–
Gold Flds Prop R		137xd	—	170	120	14.0	6.2	10.7
NK Props		80	—	85	75	3.22	11.4	–
SASOL	♥	645	—	710	475	3,777	1.7	–
SA Brews		£18½	—	£26¼	£16⅛	4,869	2.2	Φ
Standard Bank		£24⅝	–⅛	£32⅞	£21⅞	2,922	1.5	20.9
Tiger Oats	†	790	—	1270	770	1,188	2.1	16.2
Tongaat-Hulett		780xd	—	1247	735	747.8	2.3	Φ

GUIDE TO LONDON SHARE SERVICE

Prices for the London Share Service delivered by FT Extel, a member of the Financial Times Group.

Company classifications are based on those used for the FT-SE Actuaries Share Indices.

Closing mid-prices are shown in pence unless otherwise stated. Highs and lows are based on intra-day mid-prices over a rolling 52 week period.

Where stocks are denominated in currencies other than sterling, this is indicated after the name.

Symbols referring to dividend status appear in the notes column daily as a guide to yields and P/E ratios. Dividends and Dividend covers are published on Monday.

Market capitalisation shown is calculated separately for each line of stock quoted.

Earnings used in calculations are based on IIMR 'Headline Earnings' formula.

Price/earnings ratios are based on latest annual reports and accounts and, where possible, are updated on interim figures.

Yields are based on mid-prices, are gross, adjusted for a dividend tax credit of 20 per cent and allow for value of declared distribution and rights.

Estimated Net Asset Values (NAVs) are shown for Investment Trusts, in pence per share, along with the percentage discounts (Dis) or premiums (Pm -) to the current closing share price. The NAV basis assumes prior charges at par value, convertibles converted and warrants exercised if dilution occurs.

- * Highs and lows marked thus have been adjusted to allow for capital changes
- † Interim since increased or resumed
- ‡ Interim since reduced, passed or deferred
- Φ Figures or report awaited
- ♥ Rule 2.1(a)(iv) Overseas incorporated companies listed on an approved exchange.
- ♣ Free annual/interim report available, see details below.
- ✤ USM: not listed on Stock Exchange and company not subjected to same degree of regulation as listed securities.
- ‡‡ Rule 4.2(a) Irish incorporated non-listed companies.
- # Price at time of suspension
- ¶ Indicated dividend yield after pending scrip and/or rights issue
- ✦ Merger bid or reorganisation in progress
- § Forecast dividend yield: p/e based on earnings updated by latest interim statement.
- ♠ Unregulated collective investment scheme.

a Yield based on annualised dividend
b Figures based on prospectus or other official estimates.
g Assumed dividend yield after rights issue.
h Assumed dividend yield after scrip issue.
p Rights issue pending
q Earnings based on preliminary figures.
s Dividend yield excludes a special payment
t Indicated dividend yield, p/e ratio based on latest annual earnings.
u Forecast, or estimated annualised dividend yield, p/e based on previous year's earnings
z Dividend yield includes a special payment

F Yield based on prospectus or other official estimates for 1996-97.
G Assumed yield after pending scrip and/or rights issue.
H Yield based on prospectus or other official estimates for 1995.
X Yield based on prospectus or other official estimates for 1995
L Estimated annualised yield, p/e based on latest annual earnings
M Yield based on prospectus or other official estimates for 1995-96.
Il Dividend is paid in whole or part as a

FID (Foreign Income Dividend)
E Forecast annualised yield, p/e based on prospectus or other official estimates.
W Pro forma figures
Z Dividend yield to date.

Abbreviations:
xd ex dividend;
xc ex scrip issue;
xr ex rights;
xa ex all;
xf ex capital distribution.

This service is available to companies whose shares are regularly traded in the United Kingdom for a fee of £1350 a year for each security shown, subject to the Editor's discretion

♣ FT Free Annual Reports Service

You can obtain the current annual/interim report of any company annotated with ♣. Please quote the code FT1795. Ring 0181 770 0770 (open 24 hours including weekends) or Fax 0181 770 3822. Reports will be sent the next working day, subject to availability.

FT Company Focus / Focus Plus

Comprehensive 10-18 page report available on this company, containing key news stories from the last year, latest survey of City profit forecasts and investment recommendations, 5 year financial and share price performance review, balance sheet and profit and loss data, plus recent Stock Exchange announcements.
Company Focus (FT news) £6.45.
Focus Plus (FT and Investors Chronicle news) £8.95.
To order, call 0121 200 4678.
Reports published by ShareFinder Ltd.

FT Cityline

Up-to-the-second share prices are available by telephone from the FT Cityline service. See Monday's share price pages for details.
An international service is available for callers outside the UK, annual subscription £250 stg.
Call 0171 873 4378 for more information on FT Cityline.
For readers phoning from outside UK, please dial +44 in place of the first 0.
The share prices printed on these pages are also available on the internet at http://www.FT.com.

LONDON STOCK EXCHANGE

MARKET REPORT

US news undermines sentiment in shares

By Steve Thompson, UK Stock Market Editor

The prospects of a rise in US interest rates following the next meeting of the US Federal Reserve's policy making committee, the FOMC, returned to haunt global markets yesterday, including London.

The worries re-emerged after a series of US economic news items, all of which pointed to a strengthening of the US economy and which were perceived as having the potential to increase inflationary pressures.

After fighting hard throughout the morning session to stay within sight of the recent all-time highs, many of the UK's leading stocks finally gave way in the wake of the news from the US, sliding back to close only a shade above the day's lowest levels.

The FT-SE 100 index, which burst through to new all-time intra-day and closing highs on Wednesday, finished the day a hefty 33.7 down at 3,885.0, with the FT-SE Actuaries All-Share index, which also reached a new peak on Wednesday, similarly pressured.

With the big investing institutions concentrating their selling efforts on the highly liquid leaders, there was much less downside pressure on the second-liners, represented by the FT-SE Mid 250 index, which closed with a modest 5.7 decline at 4,432.1.

US stocks and bonds fell heavily in the wake of the economic news, which showed a sharper than expected upward revision in US second quarter gross domestic product and strong new home sales.

The news saw the yield on the US 30-year bond move back above the 7 per cent level and drive the Dow Jones Industrial Average down over 40 points shortly after the opening.

Leading marketmakers said London had been surprised by the weight of selling in the market as the news from across the Atlantic was absorbed. "There was some big selling and we certainly had to take some sizeable lumps of stock on board," said one dealer. He said the FT-SE future initially bore the brunt of the selling.

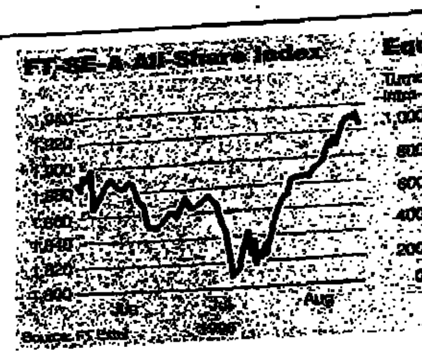
There was a measure of support for equities from the gilts market which put up a resilient showing in the face of the weak US bond market.

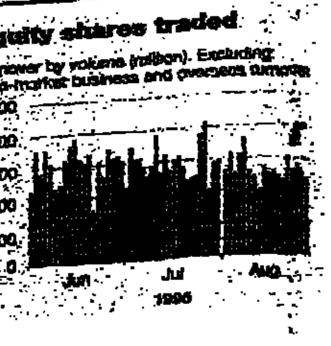
Other traders said London could not ignore the downturn on Wall Street and was due a correction after hitting new highs over recent trading sessions.

The level of turnover in the equity market continued to pick up, expanding to 730.5m shares at the 6pm count. Customer business on Wednesday was worth £1.64bn.

Takeover speculation continued to drive a handful of stocks and was again in evidence in Zeneca, the pharmaceuticals group whose shares equalled their all-time high.

Standard Chartered captured the limelight in the banking arena with a big seller at the outset of trading easily accomodated and followed by a rash of buying from overseas sources, especially the US.





Indices and ratios

FT-SE 100	3885.0	-33.7
FT-SE Mid 250	4432.1	-5.7
FT-SE-A 350	1946.7	-13.6
FT-SE-A All-Share	1923.75	-12.49
FT-SE-A All-Share yield	3.83	3.82
FT Ordinary Index	2805.7	-33.2
FT-SE-A Non Fins p/e	17.41	17.47
FT-SE100 Fut Sep	3892.0	-50.0
10 yr Gilt yield	7.86	7.88
Long gilt/equity yld ratio	2.14	2.15

Best performing sectors

1 Property +0.6
2 Distributors +0.5
3 Household Goods +0.3
4 Transport +0.2
5 Banks: Merchant +0.1

Worst performing sectors

1 Gas Distribution -1.8
2 Tobacco -1.8
3 Extractive Industries -1.5
4 Retailers: Foods -1.5
5 Alcoholic Beverages -1.3

Bid hint drives Hambros

By Lisa Wood, Joel Kibazo, Jeffrey Brown and John Dludlu

Shares in merchant bank Hambros rose in early trading as speculation of a possible break up bid for the UK group did the rounds in the market.

The talk was triggered by Wednesday's news that venture fund group Regent Pacific had not only taken a 3 per cent stake in Hambros but also criticised its performance.

The stock, which has risen steadily since mid-July, advanced further in the first half of the session before profit-takers gained the upper hand. The shares eventually closed unchanged at 267½p.

BZW downgraded its recommendation on the stock from "buy" to "hold", suggesting the shares were near its fair value estimate of 270p a share. However, Mr Phillip Gibbs at the investment bank remains confident that the bank is showing strong recovery and expects profits this year in the region of £100m, against £20.6m last year.

Referring to the move by Regent Pacific, Mr Gibbs said: "This may prove to be a reasonable investment for Regent Pacific but I am not sure what else it is trying to achieve as strong recovery is already on the way."

Ladbroke was the best performer on the FT-SE 100, climbing 5 to 211p on trade of 13m following interim results at the top end of expectations and long awaited details of a tie-up with Hilton Hotels, including a reciprocal share arrangement.

A number of analysts increased profit forecasts including Kleinwort Benson which raised its full-year estimate from £165m to £170m. ABN-Amro Hoare Govett went up from £150m to £161m.

Property shares, underpinned recently by positive broker notes, were spurred on to greater efforts yesterday by an upbeat interim statement from Slough Estates.

Second line stocks were the main beneficiaries. Slough advanced more than 4 per cent to top the FT-SE Mid 250 rankings, and stocks like British Land and Brixton Estates met with good demand.

BZW issued a bullish note on Wednesday, pinpointing the sector's upside attractions. The broker feels that fund managers could shortly be diversifying more aggressively into direct property. These arguments were partly underpinned by the statement from Slough which saw rental values for the best quality space turning modestly higher.

At all events the sector held very steady in the face of the heavy afternoon sell-off for equities generally. Slough gained 11 to a new 52-week high of 248p, British Land 6 to 461½p. Brixton put a penny to 186p and Capital Shopping 6 to 331p.

Cadbury Schweppes rose 6 to 512½p ahead of next week's interim results which are expected to come in at the upper end of the broker forecast range. The stock traded an above-average 5.2m shares with a further 1.3m equivalent passing through the traded option pits.

Food retailers were adversely affected by reports from J Sainsbury that it was "on track" to achieve 2 to 3 per cent sales growth after the launch of its Reward loyalty card in June. Tesco fell 9 to 302p on turnover of 9.8m shares while Asda fell 3¼ to 110¼p on turnover of 16m shares.

Analysts pointed out, however, that Sainsbury, which softened 3 to 389½p, had not said when it expected to achieve the increase in revenues and that it was not a current trading figure. Sainsbury said at the time of the launch of the card that it needed 2 to 3 per cent sales growth to cover the costs of the introduction.

Engineering leader Rolls-Royce fell out of favour following a broadly disappointing set of interim figures.

The lack on a dividend increase was the main bone of contention, but most analysts were agreed that the underlying earnings performance was on the dull side. There were some downgrades. SGST cut back by £25m to £205m for the year. The shares fell back 5½ to 225½p in turnover of 15m, the heaviest single day volume since mid-June.

Telecoms leaders shared in the downslide with BT off 4½ to 373½p and Vodafone 6½ to 242p, but volumes were modest. Some brokers have begun to pinpoint value in the sector.

Cable & Wireless, which has fallen almost 25 per cent since April, stayed firmly on the downside in spite of a positive note from NatWest Securities.

The broker pinpoints the potential for what it describes as an emerging management story, and sets a number of specific target prices for the shares, starting at 460p.

NatWest analysts expect the City profile of Mr Dick Brown, C&W's new chief executive, to have an increasing impact on sentiment over the immediate term.

They look for disposals - C&W has a "fairly long tail of loss-making activities" – as an initial step towards a radical restructuring within the group.

Any radical restructuring is said to "open up valuations in excess of 500p, and possibly as much as 600p" for the shares. These dipped 4¼ to 416p yesterday.

Among builders merchants, Meyer International fell 16½ to 408½p after talk that a leading broker had urged clients to switch from Meyer to Wolseley. Wolseley ended 3½ firmer at 463½p in volume of 2.6m.

In building materials, Redland softened 10 to 440p. Roskel shed 19 to 90p after announcing sharply lower interim profits.

Allders advanced 5½ to 214p on reports that it might offer a special dividend. Analysts said that if this was 50p, as suggested, it would be at the top end of expectations.

Next rose 6½ to 574p on reports that its new autumn range of clothes was selling well. Carpetright rose 8 to 600p on a relatively small turnover of shares while Allied Carpets fell 2 to 266½p.

There was profit taking in Great Universal Stores which fell 12 to 657½p. Pharmaceuticals group Zeneca was said to have been the subject of Swiss buying. The shares jumped 20½ to 1538p.

A large buyer combined with the return of vague bid talk to drive Standard Chartered ahead. The shares closed 7½ ahead at 728½p. Volume at the close of business stood at 4.6m, well ahead of recent levels of activity in the stock.

Among electricity stocks, there was a two way pull in Scottish Power which brought volume of 6.1m. The shares eased ½ to 305½p.

FINANCIAL TIMES EQUITY INDICES

	Aug 29	Aug 28	Aug 27	Aug 23	Aug 22	Yr ago	*High	*Low
Ordinary Share	2805.7	2838.9	2835.3	2838.0	2821.8	2614.8	2885.2	2668.8
Ord. div. yield	4.05	4.01	4.02	4.02	4.04	4.12	4.22	3.76
P/E ratio net	17.00	17.18	17.15	17.16	17.05	15.57	17.25	15.80
P/E ratio nil	16.84	17.02	16.99	17.00	16.89	15.48	17.09	15.71

Ordinary Share index since compilation: high 2885.2 19/04/96; low 49.4 26/06/40. Base Date: 1/7/35.

Ordinary Share hourly changes

Open	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	High	Low
2833.3	2832.7	2833.6	2829.8	2824.9	2828.2	2815.0	2813.9	2804.7	2834.2	2804.7

	Aug 29	Aug 28	Aug 27	Aug 23	Aug 22	Yr ago
SEAQ bargains	36,751	36,207	34,938	32,431	28,623	22,488
Equity turnover (£m)†	–	1637.0	1286.8	1588.3	1460.2	1786.5
Equity bargains†	–	42,821	38,003	36,046	33,547	34,013
Shares traded (ml)†	–	624.0	476.2	524.2	551.4	761.0

†Excluding intra-market business and overseas turnover.

	Aug 29	Aug 28	Aug 27	Aug 23	Aug 22	Yr ago	*High	*Low
FT-SE AIM	1086.30	1088.20	1089.10	1079.80	1072.50	–	1140.49	985.70

*For 1996.

■ London market data

Rises and falls*		52 Week highs and lows		LIFFE Equity options	
Total Rises	496	Total Highs	75	Total contracts	42,035
Total Falls	840	Total Lows	49	Calls	17,970
Same	1,544			Puts	24,065

Aug 29 *Data based on Equity shares listed on the London Share Service.

LONDON RECENT ISSUES: EQUITIES

Issue price p	Amt paid up	Mkt. cap (£m.)	1996 High	1996 Low	Stock
§100	F.P.	–	100	100	Acer Opps Ln 05/06
–	F.P.	12.5	68	65	†Barbican [illegible]
§110	F.P.	11.6	175	120	†Chemical Design
–	F.P.	216.2	196	193½	Daily Gr [illegible]
–	F.P.	5.17	4	4	†Denime [illegible]
§	F.P.	67.4	679½	673½	Egypt Trust
§145	F.P.	50.7	248	148	†Elec Ret [illegible]
§	F.P.	2.49	53	41	†Fayrewood
16	F.P.	8.28	23	17	†Gabriel [illegible]

† Alternative Investment Market. § Placing price. * Introduction. For a full explanation of all other symbols please refer to The London Share Service notes.

FUTURES AND OPTIONS

TRADING VOLUME

FT GOLD MINES INDEX

FT - SE Actuaries Share Indices — The UK Series

CONTRACTS & TENDERS

GOVERNO DO ESTADO PARANÁ

SALTO CAXIAS HYDROELECTRIC POWER STATION INTERNATIONAL BIDDING C-302 ISOLATED PHASE BUSES DELIVERY DATE POSTPONEMENT

COMPANHIA PARANAENSE DE ENERGIA - COPEL, informs that the delivery date of the instructions to Bidders and the Contract Documents referring to International Competition C-302 was postponed to September 25, 1996 at 2:00 P.M., at COPEL's office meeting room, in Curitiba, at 233 Voluntarios da Patria Street, ground floor, in the State of Paraná, Brazil.

All other provisions of the Instructions to Bidders remain unmodified

COMPANHIA PARANAENSE DE ENERGIA

COMPANY NOTICES

Lebion Sales Corporation

a U.S. Virgin Islands Corporation, may be available to enter into leasing transactions, as lessor, with respect to U.S. manufactured property to be used outside the U.S. If interested, please contact the company at:

Lebion Sales Corporation c/o Citco St. Thomas, Inc. P.O. Box 8560 Charlotte Amalie St. Thomas, U.S.V.I. 00801

PFI International, Inc.

a Guam Corporation, may be available to enter into leasing transactions, as lessor, with respect to U.S. manufactured property to be used outside the U.S. If interested, please contact the company at:

PFI International, Inc. P.O. Box BP Agana, Guam

Koala FSC, Ltd.,

a Bermuda Corporation, may be available to enter into leasing transactions, as lessor, with respect to U.S. manufactured property to be used outside the U.S. If interested, please contact the company at:

Koala FSC, Ltd. c/o CODAN Services, Ltd. Clarendon House Church Street Hamilton, Bermuda

NOTICE OF EXTRAORDINARY GENERAL MEETING

THE HARTSTONE GROUP PLC

PUBLIC NOTICES

NOTICE OF APPOINTMENT OF JOINT LIQUIDATORS and NOTICE TO CREDITORS TO CLAIM

MITSUI NEIMEI INVESTMENT JERSEY LIMITED (IN VOLUNTARY LIQUIDATION)

مكتبة من الأرحل

صحكنا من الاهل

Highs & Lows shown on a 52 week basis

WORLD STOCK MARKETS

EUROPE

AUSTRIA (Aug 29 / Sch)

[illegible]

BELGIUM/LUXEMBOURG (Aug 29 / Frs.)

[illegible]

CZECH REP (Aug 29 / Koruna)

[illegible]

DENMARK (Aug 29 / Kr)

[illegible]

FINLAND (Aug 29 / Mka)

[illegible]

FRANCE (Aug 29 / Frs.)

[illegible]

GERMANY (Aug 29 / Dm.)

[illegible]

GREECE (Aug 29 / Drachma)

[illegible]

ITALY (Aug 29 / Lire)

[illegible]

NETHERLANDS (Aug 29 / Fls.)

[illegible]

NORWAY (Aug 29 / Kroner)

[illegible]

POLAND (Aug 29 / Zloty)

[illegible]

PORTUGAL (Aug 29 / Escudo)

[illegible]

SPAIN (Aug 29 / Pts.)

[illegible]

SWEDEN (Aug 29 / Kronor)

[illegible]

SWITZERLAND (Aug 29 / Frs.)

[illegible]

TURKEY (Aug 29 / Tk.Lira)

[illegible]

PACIFIC

JAPAN (Aug 29 / Yen)

[illegible]

HONG KONG (Aug 29 / H.K.$)

[illegible]

INDONESIA (Aug 29 / Rupiah)

[illegible]

MALAYSIA (Aug 29 / MYR)

[illegible]

NEW ZEALAND (Aug 29 / NZ $)

[illegible]

SINGAPORE (Aug 29 / S$)

[illegible]

AUSTRALIA (Aug 29 / Aust$)

[illegible]

SOUTH KOREA (Aug 29 / Won)

[illegible]

TAIWAN (Aug 29 / TW $)

[illegible]

THAILAND (Aug 29 / Baht)

[illegible]

MONTREAL (Aug 29 / Can $) 4 pm close

[illegible]

AFRICA

SOUTH AFRICA (Aug 29 / Rand)

[illegible]

NORTH AMERICA

CANADA

TORONTO (Aug 29 / Can $) 4 pm close

[illegible]

Prices supplied by Telekurs

NOTES - Prices on this page are as quoted on the individual exchanges and are mostly last traded prices. * Calendar year high and low. ‡ Dealings suspended. xd Ex dividend. xc Ex scrip issue. xr Ex rights. xa Ex all. † Priced in US $.

FT FREE ANNUAL REPORTS SERVICE
You can obtain the current annual/interim report of any company annotated with ♣. Please quote the code FT8185. Ring 0181 770 0770 (open 24 hours including weekends) or fax 0181 770 3822. If calling from outside UK, dial +44 181 770 0770 or fax +44 181 770 3822. Reports will be sent on the next working day, subject to availability.

INDICES

[illegible]

INDEX FUTURES

[illegible]

US INDICES

Dow Jones	Aug 28	Aug 27	Aug 26	1996 High	1996 Low	Since compilation High	Since compilation Low
Industrials	5712.38	5711.27	5693.89	5778.00 (22/5)	5032.94 (10/1)	5778.00 (22/5/96)	41.22 (8/7/32)
Home Bonds	101.98	102.02	102.04	106.09 (14/2)	100.99 (15/7)	109.77 (18/10/93)	54.99 (1/10/81)
Transport	2071.03	2071.03	2057.76	2296.20 (22/5)	1882.71 (18/1)	2296.20 (22/5/96)	12.32 (8/7/32)
Utilities	218.91	218.84	217.93	234.00 (12/2)	204.88 (30/7)	256.46 (31/8/93)	10.50 (8/4/32)

DJ Ind. Day's high 5747.89 (5735.32) Low 5678.72 (5670.58) (Theoretical¶)
Day's high 5727.18 (5712.01) Low 5702.40 (5690.93) (Actual¶)

Standard and Poors	Aug 28	Aug 27	Aug 26	1996 High	1996 Low	Since compilation High	Since compilation Low
Composite‡	664.81	666.40	663.88	678.51 (24/5)	598.48 (10/1)	678.51 (24/5/96)	4.40 (1/6/32)
Industrials¶	785.34	786.75	783.70	807.88 (5/6)	702.07 (15/1)	807.88 (5/6/96)	3.62 (21/6/92)
Financial	69.40	69.79	69.57	70.68 (22/8)	58.67 (10/1)	70.68 (22/8/96)	8.64 (1/10/74)
NYSE Comp.	356.79	357.15	355.89	363.74 (24/5)	321.41 (10/1)	363.74 (24/5/96)	4.46 (25/4/42)
Amex Mkt Val	563.39	562.05	560.62	614.99 (22/5)	525.60 (16/7)	614.99 (22/5/96)	29.31 (9/12/72)
NASDAQ Cmp	1153.88	1149.02	1139.22	1249.14 (5/6)	988.57 (15/1)	1249.14 (5/6/96)	54.87 (31/10/72)

■ RATIOS

	Aug 23	Aug 16	Aug 9	Year ago
Dow Jones Ind. Div. Yield	2.21	2.18	2.21	2.50
	Aug 28	Aug 21	Aug 14	Year ago
S & P Ind. Div. yield	2.02	2.02	2.04	2.07
S & P Ind. P/E ratio	21.77	21.74	22.04	18.68

■ NEW YORK ACTIVE STOCKS

Wednesday	Stocks traded	Close price	Change on day
Pepsico	13,521,200	30	-1
IBM	3,706,400	114⅝	+2⅞
Philip Mor	3,531,200	91¼	-⅝
Tele Brasl	3,055,200	76¾	+3
Bay Ntwk	2,914,500	27⅞	-1⅛
Pacific Gs	2,328,400	22⅝	+¾
H & R Blck	2,291,200	25¾	-2⅛
Hewlett-Pk	2,289,000	45⅝	+⅛
Tele Mex	2,088,300	34⅛	-¼
Canad Pac	1,931,200	22⅞	-⅛

■ TRADING ACTIVITY

● Volume (million)

	Aug 28	Aug 27	Aug 26
New York SE	296,382	306.352	281.407
Amex	16.687	18.224	19.298
NASDAQ	470.868	508.551	432.267
NYSE			
Issues Traded	3,161	3,181	3,169
Rises	1,305	1,383	871
Falls	979	904	1,343
Unchanged	877	894	955
New Highs	94	76	61
New Lows	21	18	23

■ S&P 500

	Open	Latest	Change	High	Low	Est. vol.	Open Int.
Sep	665.65	664.00	−1.70	665.75	663.60	39,478	165,430
Dec	–	671.85	–	–	–	3,954	22,087

■ NIKKEI 225

	Open	Sett price	Change	High	Low	Est. vol.	Open Int.
Sep	20760.0	20590.0	−190.0	20760.0	20530.0	38,719	218,271
Dec	20800.0	20620.0	−100.0	20800.0	20550.0	26,228	69,806

Open interest figures for previous day.

GMT. ● Excluding bonds. ‡ Industrial, plus Utilities, Financial and Transportation. ¶ Day's highs and lows are the averages of the highest and lowest prices reached during the day by each stock; highs and lows (supplied by Telekurs) represent the highest and lowest values that the index has reached during the day. (The figures in brackets are previous day's). ¶ Subject to official recalculation.

■ TOKYO - MOST ACTIVE STOCKS: Thursday, August 29, 1996

	Stocks Traded	Closing Prices	Change on day		Stocks Traded	Closing Prices	Change on day
TYK Corp	8.3m	1690	+170	Mitsui Co	2.9m	921	-3
Mitsubishi Heavy	3.6m	868	-17	Nichiboshin	2.8m	540	
OKK Corp	3.3m	536	+26	Matsushita E Ind	2.6m	1850	-40
Mitsui Matushima	3.2m	684	+9	Nippon Steel Corp	2.2m	342	-2
Taihei Kogyo	3.0m	680	+23	NEC Corp	2.1m	1180	

4 pm close August 29

NEW YORK STOCK EXCHANGE PRICES

- A -

- B -

- C -

- D -

- E -

- F -

- G -

- H -

- I -

- J -

- K -

- L -

- M -

- N -

- O -

- P - Q -

- R -

- S -

Continued on next page

هكذا من الاصل

صكنا من الاحمل

4 pm close August 29

NYSE PRICES

1996 High	Low	Stock	Div.	Yld. %	P/E	Sls 100s	High	Low	Close Quote	Chng Prev. Close
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Continued from previous page

- T -

- U -

- V -

- W -

- X - Y - Z -

Price data supplied by Telekurs

FT Free Annual Reports Service

AMEX PRICES

4 pm close August 29

Stock	Div.	P/E	Sls 100s	High	Low	Close	Chng
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NASDAQ NATIONAL MARKET

4 pm close August 29

Stock	Div.	P/E	Sls 100s	High	Low	Last	Chng
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

- A - - B - - C - - D - - E - - F - - G - - H - - I - - J - - K - - L - - M - - N - - O - - P - Q - - R - - S - - T - - U - - V - - W - - X - Y - Z -

FINANCIAL TIMES
Friday August 30 1996

AMERICA

Interest rate concerns take Dow lower

Wall Street

Interest rate concerns raised by a stronger-than-expected report on second quarter economic growth sent US share prices lower at midsession, *writes Lisa Bransten in New York.*

At 1 pm the Dow Jones Industrial Average was 32.55 weaker at 5,679.83, the Standard & Poor's 500 was off 3.68 at 661.13, and the American Stock Exchange composite fell 0.74 at 562.65. NYSE volume was 175m.

Technology shares were also mostly weaker with the Nasdaq composite off 2.94 at 1,150.94 and the Pacific Stock Exchange technology index fractionally down.

The yield on the benchmark 30-year Treasury bond rose above 7 per cent for the first time since late July as both the stock and bond markets were unsettled by the Commerce Department's report that the gross domestic product grew by 4.8 per cent in the second quarter. Earlier, the department had estimated 4.2 per cent growth.

In addition to sending long-term interest rates higher, the strong report raised concerns that the Federal Reserve might act to slow the economy by raising short term interest rates as soon as next month.

Commercial banks, especially sensitive to changes in interest rates, were weaker. Chase Manhattan Bank lost $1⅛ at $75⅞, Citicorp lost $⅜ at $85⅛ and Bankers Trust was off $⅝ at $78⅛.

Shares in Baxter International jumped $3⅝ or 8 per cent to $45 after the company announced that it had agreed to buy Immuno International in a deal valued at about $715m.

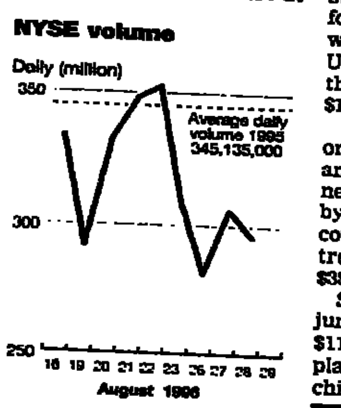
Housecall Medical Services, a home healthcare company, lost over 50 per cent of its value as the shares tumbled $7⅝ to $7⅛.

Shares in Hilton Hotels opened as much as $1⅜ stronger on news that it had formed a marketing alliance with Ladbroke Group of the UK, but by early afternoon the shares were off $⅛ at $106⅝.

Red Lion Hotels added $3⅛ or 15 per cent at $27⅜ after announcing that it was in negotiations to be acquired by Doubletree, another hotel company. Shares in Doubletree were unchanged at $38⅛.

Sierra Semiconductor jumped $2⅜ or 26 per cent to $11⅝ after saying that it planned to leave the modem chipset business.

NYSE volume



Canada

Toronto was mixed at midsession, sapped of energy and direction ahead of the forthcoming long holiday weekend. The TSE-300 composite index was 4.99 easier by noon at 5,179.10 in volume of 41.8m shares.

The market was abuzz with a rumour that RBC Dominion Securities, the brokerage arm of Royal Bank of Canada, might offer to buy the independent Richardson Greenshields, the stockbroker, for about C$480m. Royal Bank gave up 10 cents to C$34.65.

Circo Craft rose 65 cents to C$10.90 on rumours that a higher bid was imminent for the circuit board manufacturer, already subject to a hostile C$9.50 per share bid.

Futures drive S Africa

The futures related strategies adopted by a small number of local banks continued to determine Johannesburg's direction with prices closing higher on persistent demand from these investors.

The overall index rose 25.1 at 6,704.4, industrials were up 15.9 to 7,853.8 and golds added 21.8 to 1,808.7.

Brokers noted an improvement in sentiment after the release of July balance of trade data that showed a sharp turnround in South Africa's trade position.

Anglo American gained R2 to R270 in further response to Wednesday's plan to sell most of its 47 per cent stake in Johnnies Industrial, currently shared with De Beers. Johnnic slipped 25 cents to R55.75.

Mexico City rocked

News that guerrillas had launched attacks in two southern states and left several people dead rocked the markets in MEXICO CITY. By midsession the IPC index was down 56.29 or 1.6 per cent at 3,354.55, although some brokers said that there was an element of profit-taking following recent gains.

At least 13 people were killed when masked rebels struck at police and military posts in the southern states of Oaxaca and Guerrero. The attacks were apparently launched by a new rebel force calling itself the Popular Revolutionary Army.

SAO PAULO was slightly firmer in early trading with Telebras providing the backbone to the session's activity. The Bovespa index was up 175 at 63,123 by noon.

Telebras was up R$0.16 at R$62.15.

EUROPE

Paris leads bourses down in weak afternoon

The upward revision in US second-quarter GDP growth data upset an already nervous PARIS. With the franc weaker against the D-mark, and expectations rising that the country's trade unions were planning a series of strikes this autumn in protest against the government's social and economic policies, the CAC-40 index lost 25.34 or 1.3 per cent at 1,977.56.

Turnover was over FFr3bn. Eridania Beghin-Say, the Franco-Italian agro-food conglomerate, lost FFr18 or 2.4 per cent to FFr724 as investors anticipated poor first half results next week. Analysts forecast lower first half profits, due to higher wheat and maize prices.

Thomson CSF, the defence division of Thomson, soon to be privatised, was one of the session's few gainers, up FFr1.90 or 1.4 per cent to FFr141. Lagardere, expected to make a bid for the parent, said that it would control at least 60 per cent of the new merged group. Lagardere shed FFr3.20 or 2.6 per cent to FFr121.1. Alcatel Alsthom, a potential rival bidder, fell FFr7.20 or 1.8 per cent to FFr390.80.

FRANKFURT moved from a minimal gain to a small loss on the US data, the Dax index closing 7.80 lower at 2,548.84 in turnover down from DM8.9bn to DM6.4bn.

Brokers were phlegmatic, rather than excitable: reports that Iran was suing Siemens for $5.4bn for failing to complete a nuclear power plant, abandoned after the 1979 Islamic revolution, left the shares only 66 pfg lower at DM73.18.

There was relative strength in carmakers where Volkswagen put on another 30 pfg at DM550, and Daimler fell only 41 pfg to DM80.85 after its half year profits came out at the top end of expectations; in chemicals, with profit taking in train, Bayer fell 77 pfg to DM52.78 and Hoechst 65 pfg to DM70.

However, there were bigger movements in auto components. Varta dropped DM27 or 9.2 per cent to DM268; the battery maker said that it had merely narrowed its losses in the first half of 1996.

MADRID saw relative strength in Repsol, up Pta25 at Pta4,110, and weakness in Telefónica and the utilities sector as the general index fell 2.79 to 355.69.

There had been some negative estimates ahead of the Repsol half year figures, said Mr Jason Mande at Dillon Read, and the oil group had risen in relief at a 1 per cent fall in profits; Telefónica demonstrated its interest rate sensitivity with a drop of Pta65 or 2.7 per cent to Pta2,330; and in utilities, where Sevillana fell Pta25 or 2.4 per cent to Pta1,015, there were worries about a new, harsher regulatory environment which will apply from later this year.

ZURICH had to contend with further disappointment as Georg Fischer unveiled sharply lower first half net profits. The SMI index, also under pressure from the US data, fell 10.0 to 3,632.6.

Fischer dropped SFr32 or 2.6 per cent to SFr1,210. Analysts noted that the Swiss engineering industry had said earlier in the week that orders fell 7.1 per cent, year-on-year, in the first six months of 1996.

Immuno, the biotechnology company, advanced SFr3 to SFr636 after the US company, Baxter, said that it would launch a bid, offering SFr900 a share.

Swissair lost SFr14 to SFr1,090 as workers councils representing ground staff said that they would reject a proposal to cut salaries. At the same time, analysts forecast that the company would report a first half group net loss of between SFr30m and SFr70m today, down from a net loss of SFr86m in the first half of 1995.

AMSTERDAM was busy with interim results as the AEX index closed down 4.43 at 558.95.

Gist Brocades, the biotechnology company, showed a slight first half rise, forecast a substantial full year gain but fell Fl 2.30 to Fl 54.30. Hagemeyer, the trading group, dropped Fl 4.30 to Fl 126.50 as its first half results came in at the lower end of expectations, and Fortis Amev, the insurer, eased Fl 1.90 to Fl 50.90, as its results also disappointed a number of brokers.

Frans Maas, the road transport company, outperformed the market, rising 80 cents to Fl 63.80, on a robust improvement in interim figures, and positive forecast for the rest of the year.

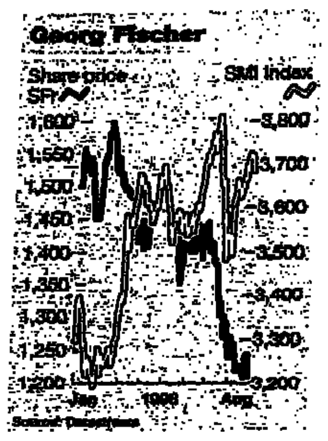
MILAN was held back by weakness in blue chips and the telecoms sector, and the Comit index eased 2.96 to 602.42. But Olivetti rose to a high of L807 before settling back to close L8.1 better on the day at L791.1, reflecting good progress at its 41.3 per cent owned mobile telephone group, Omnitel, and an overnight rise in US high technology stocks.

Traders said that the shares were also helped by market talk that a meeting in London this week between Olivetti and institutional investors had discussed the departure of Mr Carlo De Benedetti, the chairman.

Parmalat, the food and dairy company, gained L72 to L2,045 on the view that the recent successful close of its cash call had made the stock attractive again.

COPENHAGEN saw mixed results from some big blue chips as the KFX index fell 0.76 to 119.27: Tele Danmark eased DKr3 to DKr275 on figures slightly below expectations; Codan, the insurer, leapt DKr60 or 7.1 per cent to DKr910 on a bumper report; but Sophus Berendson, the holding company which retains a 37.5 per cent stake in Britain's Rentokil, fell DKr28 to DKr692 although its profits were higher.

Georg Fischer



FT-SE Actuaries Share Indices

Aug 29							THE EUROPEAN SERIES	
Hourly changes	Open	10.30	11.00	12.00	13.00	14.00	15.00	Close
FT-SE Eurotrack 100	1657.70	1657.95	1657.89	1657.70	1657.73	1657.01	1658.35	1655.84
FT-SE Eurotrack 200	1731.54	1730.77	1730.80	1729.37	1730.15	1727.12	1728.46	1724.74

	Aug 28	Aug 27	Aug 26	Aug 23	Aug 22
FT-SE Eurotrack 100	1666.30	1660.30	1657.29	1663.71	1663.11
FT-SE Eurotrack 200	1732.81	1732.81	1728.62	1734.65	1729.63

Base value 1000 (26/10/90); High/day: 100 - 1658.84; 200 - 1732.77 Low/day: 100 - 1653.80 200 - 1722.14 † Partial.

Written and edited by William Cochrane, Michael Morgan and John Pitt

ASIA PACIFIC

Nikkei falls on uncertain outlook for economy

Tokyo

The uncertain outlook for the Japanese economy weighed on sentiment and the Nikkei average lost ground on small lot selling, *writes Emiko Terazono in Tokyo.*

The 225 index fell 156.65 to 20,552.16 after trading between 20,503.62 and 20,706.99. The Topix index of all first section stocks fell 12.91 to 1,559.21 and the Nikkei 300 lost 2.35 to 290.28.

Worries about the weakness of economic recovery affected the futures market; small lot, arbitrage-linked sales and profit taking by foreign investors depressed share prices in low volume and traders said that investors were likely to remain on the sidelines until favourable economic indicators confirmed a more robust rebound in the economy.

Volume fell to 227m shares from 268m. Declines exceeded advances by 804 to 222, with 169 unchanged.

In London, the ISE/Nikkei 50 index rose 2.83 to 1390.92.

High-technology stocks faced selling by foreign investors. Matsushita Electric Industrial fell Y40 to Y1,850 and Toshiba lost Y4 at Y709.

Sumitomo Corporation, the trading company, fell Y8 to Y909 on selling by individual investors. The stock, which was sold off heavily following its announcement of $1.8bn in losses stemming from unauthorised copper trading, had lost 25 per cent since mid-June, when it released its loss figure. Traders said that the continued lack of information over the case was prompting sales by investors.

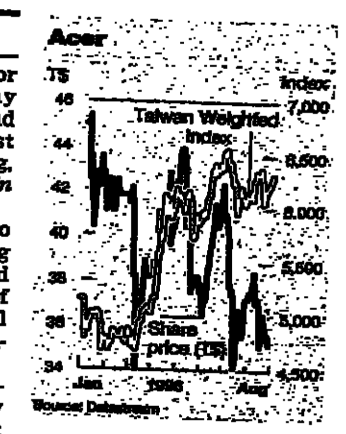
Green Cross, the drug maker specialising in blood products, fell Y3 to Y446. The stock was sold last week on the raid of its head office by prosecutors investigating its links with the HIV scandal. Investors were further discouraged by yesterday's arrest of Mr Takeshi Abe, who headed the government's advisory panel on Aids and who, allegedly, had strong ties with Green Cross.

Selling by overseas investors dropped Mitsubishi Heavy Industries Y17 to Y868 in spite of buying by domestic institutions. Other large capital steels and shipbuilders were also lower with Hitachi Zosen down Y8 at Y548 and Nippon Steel losing Y2 to Y342.

Speculative winners included Odakyu Construction, which gained Y200 to Y1,230 on purchases by foreigners while TYK, the most active issue of the day, rose Y70 to Y1,690.

In Osaka, the OSE average fell 163.71 to 21,597.16 in volume of 44.1m shares.

Acer



Roundup

Foreign buying lifted TAIPEI in spite of a weak performance by Acer. The computer manufacturer cut its 1996 profit forecast by a larger-than-expected 50 per cent, and fell 40 cents to T$35.20. Brokers said that while a downward revision had been expected, the announcement had caught people by surprise. In spite of Acer's woes the weighted index rose 55.67 to 6,256.76 as foreign institutions bought large-capitalisation blue chips in the financial, steel and petrochemical sectors.

HONG KONG took a gloomy view of a share placing rumour and the Hang Seng index lost 51.28 to 11,328.21 as turnover picked up to HK$4.1bn.

Trading in New World Development was suspended during the afternoon, when the stock was down 90 cents at HK$38.00; the company was rumoured to be placing 70m shares at HK$37.10 a share.

KUALA LUMPUR's second board ended lower for the first time this week as buyers took a pause following three days of record-setting gains. Blue chips also finished weaker, but their declines were less pronounced.

The composite index ended 0.84 down at 1,110.49 while the second board dropped 10.69 or 2 per cent to 531.06 after hitting a session peak of 545.44.

Powertek, Malaysia's first listing of an infrastructure project, ended at M$6.60, against an offer price of M$3.90.

SEOUL was supported by hopes that there would soon be an announcement on the raising of the foreign shareholding limit and the composite index rose 12.81 to 766.16.

MANILA saw speculative buying ahead of the release of important economic data next week. The composite index added 14.81 to 3,215.79.

The mining index soared 405.44 to 4,102.68.

SYDNEY ended slightly lower after a volatile session. The All Ordinaries index shed 4.9 to 2,279.3 in turnover of A$679.7m.

Brokers said that selling from offshore investors appeared to hit BHP in the last 90 minutes of trading, causing the stock to lose 17 cents to A$17.40.

Australian Gas Light proved the day's highlight, jumping 42 cents to A$6.00 on the back of a strong profit result. The gas distribution concern reported a 32 per cent rise in after-tax profit for the fiscal year ending on June 30.

Newcrest Mining, a gold producer, fell 17 cents or 3.4 per cent to A$4.76 after reporting that its after-tax profit had fallen by 51 per cent in the fiscal year ended June 30.

BOMBAY ended 1.59 per cent higher after a strong rally triggered profit-taking towards the close. The BSE-30 index finished 54.81 higher at 3493.61, off its intraday peak of 3,529.19.

Analysts noted that the upsurge came in response to reports that the government would ease a controversial minimum tax proposal for some sections of industry, together with some good corporate results.

FT/S&P ACTUARIES WORLD INDICES

The FT/S&P Actuaries World Indices are owned by FT-SE International Limited, Goldman, Sachs & Co. and Standard & Poor's. The indices are compiled by FT-SE International and Standard & Poor's in conjunction with the Faculty of Actuaries and the Institute of Actuaries. NatWest Securities Ltd. was a co-founder of the indices.

NATIONAL AND REGIONAL MARKETS (Figures in parentheses show number of lines of stock)	WEDNESDAY AUGUST 28 1996: US Dollar Index	Day's Change %	Pound Sterling Index	Yen Index	DM Index	Local Currency Index	Local % chg on day	Gross Div. Yield	TUESDAY AUGUST 27 1996: US Dollar Index	Pound Sterling Index	Yen Index	DM Index	Local Currency Index	DOLLAR INDEX: 52 week High	52 week Low	Year ago (approx)
Australia (78)	208.17	1.3	196.02	141.28	158.20	173.40	0.8	4.37	203.52	193.96	138.62	158.35	171.94	212.16	179.77	183.07
Austria (24)	181.47	0.2	172.54	124.35	139.25	139.18	0.1	2.02	181.13	172.62	123.37	139.15	139.07	195.04	168.11	182.48
Belgium (27)	217.56	-0.1	206.85	149.08	166.95	163.21	-0.2	4.08	217.86	207.62	148.39	167.37	163.58	218.69	187.17	199.78
Brazil (28)	179.24	2.4	170.41	122.82	137.54	335.23	2.5	1.91	175.02	166.79	119.21	134.46	327.15	189.70	123.97	153.97
Canada (118)	164.35	0.2	156.27	112.63	126.12	162.69	0.2	2.21	164.01	156.30	111.71	126.00	162.40	165.12	134.14	148.22
Denmark (30)	321.04	0.3	305.24	219.99	246.35	249.16	0.2	1.84	320.14	305.09	218.05	245.94	248.58	321.04	276.89	283.93
Finland (23)	212.58	0.5	202.12	145.67	163.13	200.03	0.6	2.50	211.52	201.56	144.07	162.50	198.91	276.11	171.73	256.41
France (94)	191.04	-0.6	181.64	130.91	146.60	151.54	-0.6	3.20	192.15	183.12	130.87	147.61	152.38	198.39	167.70	175.71
Germany (58)	177.63	0.2	168.88	121.72	136.30	136.30	0.1	1.79	177.23	168.90	120.71	136.15	136.15	177.63	155.66	158.84
Hong Kong (59)	436.37	0.3	414.89	299.02	334.85	433.18	0.3	3.40	435.24	414.79	296.44	334.37	432.07	461.19	354.34	354.34
Indonesia (27)	191.49	-0.2	182.07	131.22	146.94	275.01	-0.2	1.73	191.88	182.87	130.69	147.41	275.63	-	-	-
Ireland (16)	290.36	0.9	276.07	198.97	222.81	252.27	0.7	3.45	287.80	274.28	196.02	221.10	250.58	290.82	238.42	241.55
Italy (58)	76.45	-0.6	72.69	52.39	58.67	86.31	-0.7	2.80	76.95	73.33	52.41	59.11	86.90	84.53	67.22	77.39
Japan (481)	145.75	-1.3	138.58	99.88	111.84	99.88	-0.7	0.76	147.64	140.70	100.55	113.42	100.55	164.66	137.75	147.66
Malaysia (107)	552.07	-0.2	524.89	378.30	423.63	530.40	-0.1	1.71	553.10	527.11	376.72	424.91	531.12	595.09	425.77	521.56
Mexico (19)	1313.08	-0.2	1248.44	899.77	1007.59	10757.32	-0.5	1.24	1315.94	1254.09	896.29	1010.95	10815.31	1325.85	791.99	1139.89
Netherland (19)	303.11	0.5	288.19	207.70	232.59	229.04	0.4	3.22	301.80	287.33	205.35	231.63	228.08	304.24	248.70	250.43
New Zealand (15)	86.61	1.1	82.35	59.35	66.46	66.40	1.1	4.15	85.66	81.64	58.35	65.81	65.68	96.81	75.94	78.49
Norway (35)	251.07	0.9	238.71	172.04	192.66	218.19	0.7	2.07	248.85	237.16	169.49	191.18	216.67	256.94	222.24	230.65
Philippines (22)	205.58	-0.4	195.46	140.87	157.75	268.37	-0.4	0.61	206.36	196.66	140.55	158.53	269.39	-	-	-
Singapore (44)	402.02	0.3	382.23	275.48	308.49	260.57	0.2	1.46	400.86	381.85	272.90	307.82	259.98	465.21	360.49	369.48
South Africa (44)	336.67	1.7	320.10	230.70	258.34	331.87	1.4	2.28	331.08	315.52	225.50	254.35	327.26	437.76	314.20	348.47
Spain (37)	179.89	0.3	171.04	123.27	138.04	170.15	0.2	3.44	179.39	170.96	122.18	137.81	169.78	183.85	145.15	153.23
Sweden (48)	364.00	-0.1	346.08	249.43	279.31	355.93	0.0	2.40	364.34	347.22	248.15	279.90	356.87	364.34	281.96	287.07
Switzerland (37)	252.98	-0.5	240.53	173.35	194.13	186.87	-0.7	1.59	254.34	242.39	173.23	195.39	188.21	254.34	198.26	197.52
Thailand (45)	146.58	1.5	139.37	100.45	112.48	143.85	1.5	2.37	144.42	137.63	98.36	110.95	141.67	193.95	138.75	167.58
United Kingdom (200)	247.51	0.6	235.33	169.60	189.93	235.33	0.4	4.05	245.97	234.41	167.53	188.96	234.41	247.51	218.58	221.80
USA (625)	271.05	-0.2	257.70	185.73	207.99	271.05	-0.2	2.18	271.54	258.78	184.94	208.60	271.54	276.47	229.19	228.19
Americas (790)	248.08	-0.1	235.87	170.00	190.37	208.59	-0.1	2.17	248.43	236.75	169.20	190.85	208.88	252.43	209.51	209.51
Europe (706)	216.96	0.2	206.28	148.67	166.48	185.94	0.0	3.06	216.80	206.42	147.53	166.40	185.87	216.96	189.62	191.25
Nordic (136)	315.35	0.1	299.83	216.09	241.98	269.35	0.2	2.29	314.88	300.09	214.48	241.90	268.82	315.35	261.13	275.27
Pacific Basin (878)	159.89	-0.9	152.02	109.56	122.69	111.71	-0.5	1.25	161.35	153.77	109.90	123.96	112.22	177.01	149.88	157.83
Euro-Pacific (1584)	183.53	-0.4	174.50	125.76	140.83	139.71	-0.2	2.14	184.24	175.58	125.49	141.54	140.02	190.57	166.51	171.66
North America (743)	264.54	-0.2	251.52	181.28	203.00	263.87	-0.2	2.18	264.97	252.52	180.47	203.56	264.30	269.52	223.24	223.24
Europe Ex. UK (506)	195.58	-0.1	185.96	134.02	150.08	158.06	-0.2	2.51	195.76	186.56	133.33	150.39	158.31	195.76	169.65	170.98
Pacific Ex. Japan (397)	287.77	0.5	273.61	197.19	220.82	248.12	0.4	3.06	285.38	272.82	195.05	220.01	247.21	298.68	243.59	255.16
World Ex. US (1793)	184.97	-0.3	175.86	126.75	141.94	144.44	-0.2	2.14	185.54	176.82	126.37	142.54	144.67	191.55	167.98	172.88
World Ex. UK (2218)	208.20	-0.3	197.95	142.67	159.76	175.54	-0.2	1.96	208.62	199.10	142.29	160.50	175.94	213.05	185.61	186.64
World Ex. Japan (1937)	247.23	0.0	235.06	169.41	189.71	232.58	0.0	2.53	247.16	235.54	168.34	189.87	232.92	247.55	213.12	213.53
The World Index (2418)	211.59	-0.2	201.17	144.99	162.36	180.85	-0.2	2.15	212.12	202.16	144.48	162.86	181.15	214.95	188.71	188.69

CONSTITUENT CHANGES 29/8/96: Name changes: BBC 'A' (Bearer) to ABB AG (Bearer) and BBC 'B' (Registered) to ABB AG (Registered) (both Switzerland). CONSTITUENT CHANGES WITH EFFECT 2/9/96: Addition: Smedvig B (Mixed-Small Cap) (Norway). Name change: Smedvig (Common) to Smedvig A (Norway).

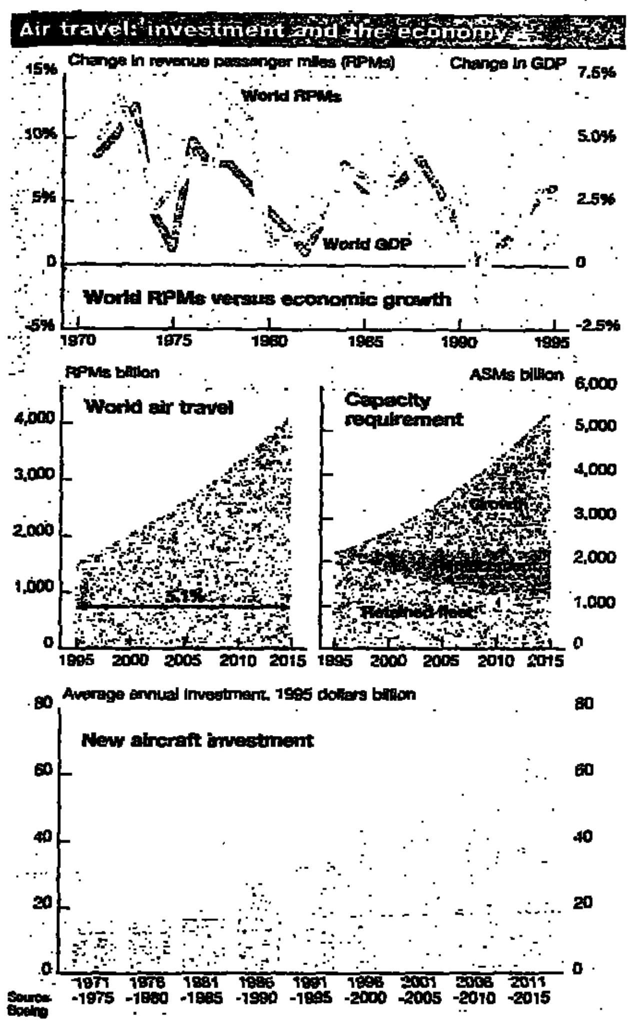
AEROSPACE

Streamlined industry will ride orders surge

Record airline profits and strong growth in orders are not deflecting commercial aircraft manufacturers from the task of consolidation, writes Michael Skapinker

Boeing of the US buys the defence and space operations of Rockwell, another US group, for $3bn. Aérospatiale and Dassault Aviation of France warily discuss a government-sponsored merger.

The consolidation of the international aerospace industry shows no sign of slowing down. In the defence sector, the reasons are obvious: the fall in government arms spending since the end of the Cold War means there are fewer contracts to go around. Contractors have to cut their costs and try to buy up the competition.



The civil aerospace sector should look different. Aircraft orders are up from their early 1990s slump. Airlines made record profits last year of $5.2bn on their international scheduled services. Boeing and Airbus Industrie, the European consortium, have increased their output.

Boeing says worldwide air travel will increase by 5.1 per cent annually for the next 20 years. Airlines will buy 18,000 new aircraft over this period, bringing manufacturers sales revenues of over $1,000bn.

Yet there are signs of consolidation in the civil aircraft sector too. McDonnell Douglas, the third biggest civil aircraft manufacturer after Boeing and Airbus, has been linked with several possible partners.

General Electric and Pratt & Whitney are to build a new engine for Boeing's planned new aircraft, the "stretched" 747 which will carry over 500 passengers.

Airbus has decided to change its corporate structure, abandoning its status as a *Groupement d'Intérêt Economique* to become a limited company. As a GIE, Airbus, which was formed in 1970, makes no profits or losses in its own right. These accrue to its owners, Aérospatiale, Daimler-Benz Aerospace (Dasa) of Germany, British Aerospace and Casa of Spain.

One of Airbus's principal aims in becoming a limited company is to cut costs, possibly by giving contracts to other manufacturers, in Asia, for example.

Why do civil manufacturers feel the same urge to consolidate as their colleagues on the defence side when the commercial aircraft business is so clearly a growth industry?

One of the reasons is that airlines have become much more commercial than they were before. Aviation markets are being liberalised and new carriers are undercutting the prices of large airlines. All airlines, even the most successful, feel the need to cut costs. They are, in turn, putting increased pressure on aircraft manufacturers to cut prices.

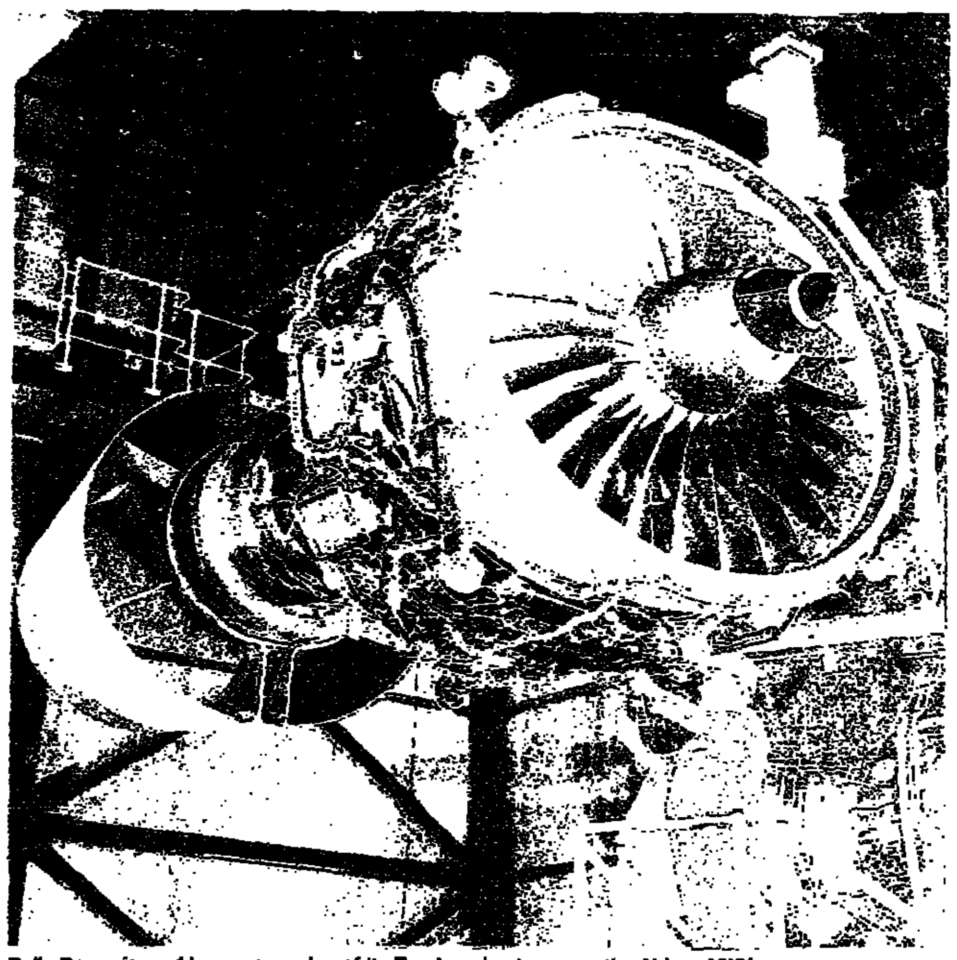
Mr Frank Shrontz, chairman of Boeing, says: "We used to be concerned about product performance: how the airplanes flew. While that's still important, we now have to look more at how much they cost."

British Airways, the highest profit earner in the airline industry, earlier this year suspended plans to spend $1bn on regional aircraft. BA had asked Boeing, Airbus, McDonnell Douglas and British Aerospace to bid to supply it with up to 60 aircraft. The airline said none of the bids was sufficiently competitive.

While prices are under pressure, the cost of developing new aircraft is high. The "stretched" Boeing could be developed for as little as $2bn, but that is because it is based on an existing aircraft.

Airbus is considering building a competing aircraft, provisionally called the A3XX. The cost of developing it is expected to be at least $8bn. Airbus wants to build the aircraft because it feels it needs to be able to compete with Boeing across its entire product range. Boeing, with the 747, has a monopoly over the 400-seat aircraft market.

Mr Jean Pierson, Airbus's managing director, said earlier this year: "In our business, one simply cannot survive as a niche participant. Some very fine, proud aeronautical firms have paid a high price for this lesson. Consolidation, coupled with shrinking defence budgets, might well be the driver behind the current spate of alliance-making in the aerospace industry in Europe.


Rolls Royce is working on a version of its Trent engine to power the Airbus A3XX

"Let us bear in mind that it was just such a rapprochement in Europe that made Airbus Industrie a reality and enabled Europe to re-establish itself as a world force in civil aircraft manufacturing. European economies have benefitted from the decision, taken 26 years ago, to abandon, in civil aircraft manufacturing, narrowly-focused nationalist pursuits in favour of a collective approach."

To build the A3XX, Airbus is looking further afield than Europe, hoping to persuade manufacturers in Asia to help develop the aircraft.

China is seen by both Boeing and Airbus as the market they have to play a part in. Boeing says it expects air traffic growth in China to average 11.5 per cent over the next two decades – more than twice the increase for the world as a whole. Boeing has a strong presence in China but the Europeans are battling to catch up.

Airbus has established an office in Beijing. Its staff there has increased from five to 70 over the past two years. It has invested $50m in joint ventures in China and is advertising heavily on Chinese television and on billboards.

Airbus's efforts were rewarded earlier this year with an order from China for 30 A320s, though Chinese anger at the US's opposition to human rights violations also played a part.

The Europeans recently scored a second win when China selected Aero International Regional (Air), a European consortium, to be its partner in the development of a 100-seat jet. The decision confirmed earlier indications that the Europeans were the favoured partners.

Air is owned by British Aerospace, Aérospatiale and Alenia of Italy and is not part of Airbus. The Chinese have indicated, however, that they would like Airbus to manage the 100-seater project and that they would prefer Dasa to be included.

The aero engine business is undergoing its own consolidation but Mr Colin Green, managing director of Rolls-Royce's aerospace division, believes it will take a different form. Instead of mergers, he says, manufacturers will become involved in an increasing number of joint projects.

There are three large engine manufacturers: Rolls-Royce of the UK, and General Electric and Pratt & Whitney of the US. There have been persistent rumours that a merger between two of the three

Continued on page 2

COMMERCIAL
- New large aircraft
- Engine makers
page 2
- Airlines
- Boeing's Frank Shrontz
page 3
- Airports
- Air traffic control
page 4
- Safety
- Air misses
- Regional aircraft
page 6
- Europe
- McDonnell Douglas
page 8
- China
- Airbus
page 9
- Satellites
- On-board entertainment
page 10
- The environment
- McDonnell's Harry Stonecipher
page 11
- California
- Finance
- Gecas
page 12

MILITARY

- Missiles
- Nimrod
page 13
- Transporters
- Helicopters
- BAe's Mike Turner
page 14
- The European Fighter Aircraft
- Sir Robert Walmsley, British chief of defence
page 15
- European consolidation
- The Joint Strike Aircraft
page 16

Editorial production: Jonathan Guthrie
Graphics: Robert Hutchison
Design: Frances Trowsdale

■ **New large aircraft:** by Michael Donne

Big three join in Jumbo battle

They are vying to produce the best family of large, long-range aircraft

Pressures for the development of a new series of larger, long-range jet airliners have been intensifying in recent years, as the airlines have recovered from their financial problems of the earlier 1990s, and passenger and cargo traffic has continued to grow. With all the forecasts indicating a continued period of traffic growth worldwide, and in particular an expansion of long-haul traffic to, from and within the vast Asia-Pacific region, those pressures have reached the point where firm procurement decisions on bigger aircraft cannot be long delayed.

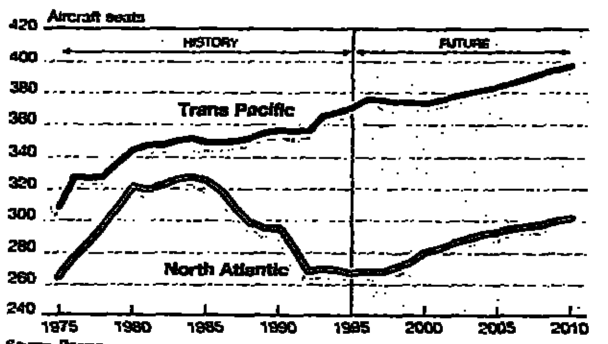
All the "big three" jetliner manufacturers – Boeing and McDonnell Douglas of the US, and Airbus Industrie of Western Europe – are engaged in refining their proposals in a market that may not be large in terms of unit numbers, but will be very lucrative.

Over the period from 1996 to 2014, Boeing foresees sales of some 1,100 aircraft in its broad 747 Jumbo jet replacement market. This will include some 600 aircraft covering sales of both current 747-400s and their immediate direct replacement, the 747-500X, and sales of another 470 of the true "New Large Aircraft", or NLA, the 550-seater 747-600X.

Airbus, in addition to continued sales of its long-range A-340 airliner, now evolving into a family of variants, foresees rather larger sales of more than 1,300 aircraft in the 500-plus seat category alone over the next 20 years. It is offering its A3XX aircraft for this market.

Most other manufacturers' forecasts for the future, including those by McDonnell Douglas and engine makers such as Rolls-Royce, tend towards the lower Boeing figure for NLAs. But no matter which figures are used, it is clear that because the market will be divided between just the three airframe manufacturers over 20 years, the battle for sales will be fearsome, and break-even production may be a long time coming.

Average aircraft size



Source: Boeing

Boeing is now actively, albeit quietly, canvassing launch orders for its two new airliners, even though a formal Boeing board commitment to the aircraft has yet to be made. It seems probable that the two prime decisions – to launch the aircraft and announce the first airline commitments – will be taken together, probably some time this autumn. Some observers have suggested that it might all happen at the forthcoming Farnborough air show, but Boeing will only say that it will be "in the fall".

Both the 747-500X and the 600X will be larger than the existing 747-400 itself, offering more range and seats. Both will have fly-by-wire controls. The 500X will be capable of carrying some 462 passengers in a three-class configuration, against the 416 capacity of the 747-400 (more in an all-economy configuration). It will also be capable of a range of 8,700 nautical miles, thereby opening up many new non-stop routes, such as New York-Hong Kong or Taipei, Los Angeles-Singapore, or Chicago-Taipei.

The 600X, however, will be a much bigger aircraft, over 45 feet longer than the 747-400, and capable of carrying some 550 passengers in a three-class configuration (more in an all-economy role) over 7,750 nautical miles. It will have new, larger wings, tail and landing gear. Both the 500X and 600X will have significantly improved seat-mile costs over the 747-400, and will offer what Boeing describes as "an affordable airplane family, providing growth in range and capacity".

Boeing will launch the 600X first, because that is what its advisory "working group" of large airlines, including British Airways, Singapore Airlines and others, have said they would like. But Boeing expects demand for both types and will eventually build both aircraft on the same production line at its 747-400 factory at Everett, north of Seattle. Entry into service is set around the year 2000 for the 600X and 2001 for the 500X, a tough target, but one that Boeing believes it can meet. Price per aircraft is not revealed, but it is likely to be more than $200m.

The Airbus A3XX – a 550-plus seater (carrying more in a "high-density" configuration) with a range of 7,500 nautical miles – is not likely to be far behind Boeing. Airbus has already stated that it sees the NLA as "a profitable market segment which it does not intend to leave to a US monopoly".

To concentrate its activities, Airbus has established an integrated "Large Aircraft Division", headed by senior vice-president, Mr Jürgen Thomas, to undertake all the pre-development activities for the A3XX. The new division's tasks include all detailed design work, in close co-operation with a group of representatives of potential customers. Airbus says that its new aircraft will have "maximum commonality with the existing Airbus Industrie family" while offering "operating costs at least 15 per cent below those of any very large aircraft in service today or currently under development".

The third contender, McDonnell Douglas, has been working on derivatives of its existing MD-11 tri-jet family, called the MD-XX, including a new "stretched" high capacity aircraft, and an ultra long-range aircraft. Like its two rivals, it has been consulting potential airline customers closely to ensure that their views are reflected in its designs.

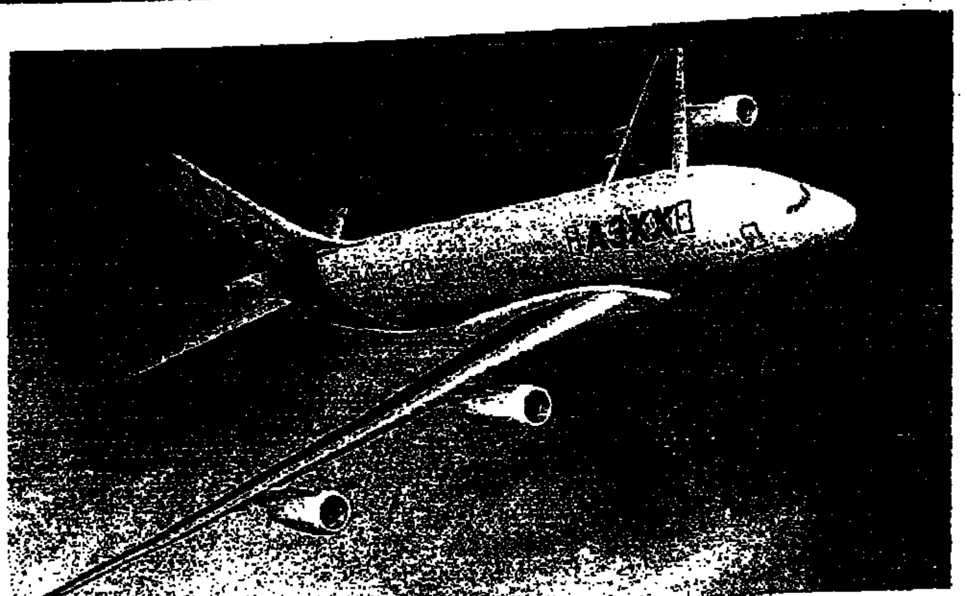
Finance is likely to be a big question for all three airframe manufacturers. Development costs will probably run to several billion dollars for each manufacturer. Success will ultimately depend on the ability to raise the necessary funds.

In this area, Boeing is probably best placed. The fact that it is developing direct derivatives, means it can use 747-400 expertise, 747-400 parts and 747-400 production facilities. Also, its track record to date – more than 8,100 of the 9,200 of its jetliners that have been ordered have already been delivered – means it would probably have little difficulty in raising cash from a combination of its own internal resources, its own shareholders, and from outside financial institutions.

McDonnell Douglas, as a leading aerospace conglomerate, also has access to considerable resources, both internally and from shareholders and financial institutions.

The Airbus consortium has already begun procedures to change its corporate structure from that of a Groupement d'Interet Economique to that of a more transparent limited company, with a view eventually to being able to raise cash from shareholders and external financial institutions. But this change is expected to take three years to achieve, during which time there will be heavier cash calls for the new A3XX venture.

In the meantime, Airbus will be obliged either to continue to rely heavily upon its partner companies to provide cash for their individual involvements in the A3XX programme, or seek government loans for the project. In this, it may well be more successful than some have suggested: its own record is now a good one, with more than 1,400 of its 2,100 or so ordered jets now delivered.



European contender in a promising market: the Airbus A-3XX, forecast to enter service in 2003

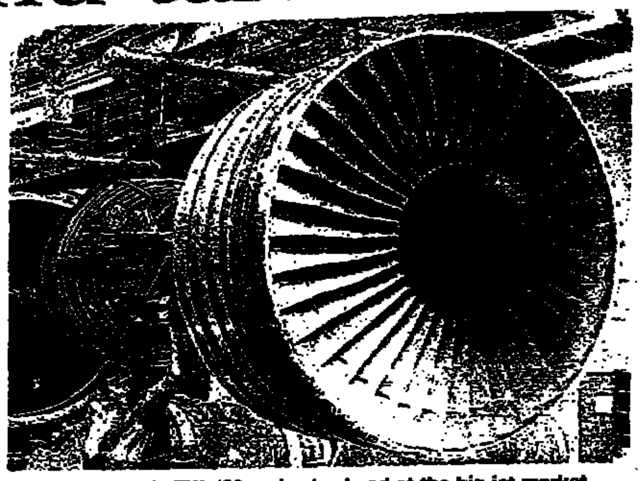
■ **Engine makers:** by Michael Donne

Demand takes off

Re-equipment of the world's airline fleets will boost manufacturers' order books

Demand for new aircraft and engines has begun to rise again from the low levels recorded in the early 1990s. This is the result of both the improving finances of the world's airlines and the expected continued growth of passenger and cargo traffic.

Re-equipment programmes tend to be cautious, with a view to keeping available aircraft capacity under tight control while airlines recoup the heavy losses of the early 1990s and restore their battered balance sheets. So while overall aircraft and engine production volumes are rising again, it is not expected that there will be a return to the almost runaway surge of buying of the late 1980s just prior to the recession.



Pratt & Whitney's PW-400 series is aimed at the big jet market

Sir Ralph Robins, chairman of Rolls-Royce, one of the world's "Big Three" engine builders (General Electric and Pratt & Whitney of the US are the others), commented in his company's annual report earlier this year: "Civil aviation is a growth industry, and the market is now showing signs of recovery. While this will take a little time to cascade through to the manufacturers, we expect to benefit from this recovery."

Boeing Commercial Airplane Group, the world's biggest jet airliner builder, has forecast that between now and 2015, some 15,900 jet airliners of all kinds will be built, worth some $1,100 billion.

About 3,900 of these will replace existing aircraft, so that the net growth in the world airliner fleet to meet traffic expansion will be around 12,000 aircraft. This will be good news for the engine builders. A study by Rolls-Royce covering the same broad period is more optimistic than the Boeing forecast, suggesting a demand for over 18,700 aircraft, of which over 13,000 will be jets and the rest turboprops, with a combined value of about $929bn.

Rolls-Royce assesses the value of the engines to be supplied at $220bn, with a further $150bn coming from spare parts for both new and existing aircraft, yielding a total engines market of $370bn. This overall world market, excluding corporate jets, will cover some 34,200 jet engines and 11,600 turbo-prop engines.

Rolls-Royce believes that just over half of the total jet engine market by value will come from demand for the "big jet" engines for medium-to-long-haul airliners. This "big jet" end of the market is generally taken to include two broad categories – one covering engines of between 45,000lbs and 65,000lbs of thrust (required for Boeing 747s and 767s, Airbus A-300s and A-310s, and McDonnell Douglas MD-11s), and the other the so-called "very high thrust" engines of 65,000lbs thrust and above (for Airbus A-330s, Boeing 777s and their derivatives, together with the prospective "new large aircraft" discussed above). Although not as large in terms of unit numbers when compared with the thousands of smaller jet and turbo-prop engines that will be bought, these specific market areas nevertheless will be very valuable.

Out of today's overall world civil jet engine sales of around $6bn annually, the segment comprising all engines of over 45,000lbs thrust collectively accounts for some $3bn. By 2014-5, when the total world engine market will have risen to over $14bn annually, over half, or more than $7bn, will be accounted for by the "big jets", with over half that in turn being accounted for by the "very high thrust" engines of over 65,000lbs thrust each. With such massive markets ahead, competition in the aero engine business is intensifying.

Rolls-Royce's own strategy is to have an engine available for every big new aircraft programme that emerges. Some time ago it added Allison Engine Company of the US to its stable so that, with its subsidiaries and joint ventures, it now supplies engines for more than 50 civil and military airframes, with over 50,000 engines in service with 300 airlines, 700 corporate operators and 120 armed forces world-wide.

At the "big jet" end of the market, all of the "big three" engine builders are involved – Rolls-Royce with its Trent family, and the US's General Electric, with its GE-90 and Pratt & Whitney with its PW-4000 series. All three have won orders for engines to power the new Boeing 777, but the Trent has done especially well in Asia-Pacific. The Trent is still the most powerful aero engine in the world, some 20 months after it was first certificated at 90,000lbs thrust. The Trent also still has significant growth potential, with a 95,000lbs version already committed for certification by 1998.

This engine is designed for "growth" versions (either longer range or higher seating capacity, or both) of the twin-engined Boeing 777. The most immediately significant development in the high thrust engine market, however, is the competition to meet the need for a new engine to power the next generation of Boeing 747 developments, the 747-500X and 600X aircraft, which Boeing is expected to launch this autumn.

Both will have longer range than the 747-400. The 600X will also have much higher capacity at around 550 passengers against the 400-plus in the standard 747-400.

Rolls-Royce has signed an agreement to offer Boeing a new Trent version, the Series 900, for the new Boeing jets. This engine is described as "a low-risk derivative" of the Trent family, designed to achieve the 10 per cent improvement in operating costs that Boeing is seeking for its new aircraft over the 747-400.

Certification is planned for December, 1999. But instead of fighting each other, the two US giants, GE and Pratt & Whitney, have decided to collaborate in a 50/50 joint venture for an engine for the new aircraft. They are taking the best technologies (but not the specific components) of both the PW-4000 and GE-90 series of very high thrust engines, and putting them together to provide a "baseline" engine of up to 84,000lbs thrust initially.

These new engines will be suitable for the other new large aircraft now being planned – by Airbus, the European aircraft manufacturing consortium, with the A3XX, and the McDonnell Douglas MD-XX, based on its existing MD-11 tri-jet. Although the formal first orders for all these new aircraft and engines have yet to come, it seems clear that they are not far away.

The joint adventurers

Continued from page 1

large manufacturers is in prospect, with a Pratt & Whitney takeover of Rolls-Royce mentioned frequently.

Rolls-Royce has repeatedly said that it will not be part of any merger. The UK group's denials have been given added force by the decision of the US companies to team up to develop an engine together for the first time for the stretched Boeing 747.

Mr Green says Rolls-Royce will develop the Trent 900 for use on both the enlarged 747 and the Airbus A3XX. It will be a variation on the group's existing Trent engines and will therefore cost less to develop than an entirely new engine.

While the collaboration between GE and Pratt & Whitney is a first for those two companies, joint ventures are nothing new in the aero engine manufacturing sector. The cost of developing new engines is high and manufacturers have looked for ways of spreading the risk for years.

GE and Snecma of France are long-standing partners. Rolls-Royce and Pratt & Whitney are already partners in International Aero Engines which makes the V2500 jet. Rolls-Royce has a joint venture with BMW of Germany.

Mr Green says: "By consolidating, the aircraft manufacturers are catching up with where the aero engine business already is."

■ **Airlines:** by Michael Skapinker

Partnerships offer protection

Carriers are striking alliances to reduce costs in line with falling prices

The world's airlines have never been as profitable as they are today. That, however, is not saying much in an industry which spent the first part of the 1990s haemorrhaging cash.

The International Air Transport Association said its members made record net profits last year of $5.2bn on their international scheduled services. But total profits in the three years 1994-96 represent only 85 per cent of the airlines' total losses in the previous three years.

Even while they register improved profits, the more far-sighted airlines are preparing for the next downturn. On the same day in May that British Airways announced full-year pre-tax profits of £585m ($906m), it said it would have to find £1bn of savings over the next three years.

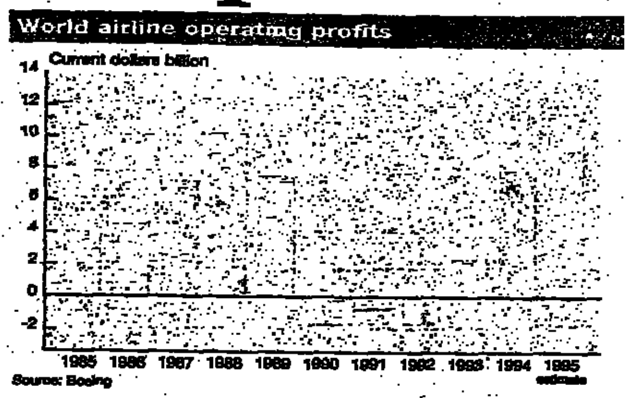
The difficulty for the airlines is that however profitable they are now, they know that the pressure on prices is downwards. Although aircraft occupancy is at record levels, the long-term trend shows that air fares have been falling for decades.

Boeing, the US aircraft manufacturer, says passenger yields – the amount of money an airline receives for each mile it carries a passenger – fell 3 per cent a year throughout the 1960s. Since then, the annual decline has been a little over 1 per cent. Boeing expects this rate of decline to continue for the next 15 years.

Partly in response airlines have begun to set up alliances with the aim of linking their flight networks. This means they can increase aircraft occupancy by feeding passengers on to each other's flights.

Another incentive for forming these partnerships is the restrictive nature of air services agreements between countries since the second world war. These

World airline operating profits



Source: Boeing

have made it difficult, for example, for US airlines to fly from European airports to third countries. They have also made it impossible for European or Asian airlines to fly within the US.

By forming alliances across the Atlantic US airlines have been able to transfer their passengers to European carriers which have the right to fly elsewhere in the world. European airlines which fly to large US cities can offer their customers flights on their US partners to smaller American destinations.

Lufthansa of Germany has formed an alliance with United Airlines of the US. Delta Air Lines of the US has an alliance with Swissair, Sabena of Belgium and Austrian Airlines. But the biggest and most controversial alliance of all was announced earlier this year between British Airways and American Airlines.

The two carriers are among the leading airlines in the world. BA was the world's busiest international airline last year, measured by the number of scheduled passenger kilometres performed, according to Iata figures. American Airlines flew more passenger kilometres within the US than any other carrier last year.

The alliance will give the two airlines the ability to fly large numbers of passengers across the Atlantic. Those flying to the US will then be able to transfer to the biggest of the US domestic networks. Those travelling to the UK will have the opportunity to fly from London to BA's impressive selection of long-haul destinations.

BA and American intend to put both their flight codes on all their transatlantic flights, regardless of which airline is operating the flight. They will also share the revenues from their transatlantic operations.

BA and American are not the only ones who can see the advantages of such a set-up. Their rivals can too – and they do not like it. They point out that BA and American will account for 60 per cent of all flights between the US and the UK, the busiest long-haul routes in the world.

USAir, in which BA has a 24.6 per cent stake, has taken legal action against the BA-American alliance, saying it is anti-competitive. USAir has also applied to the US authorities to fly to the UK in competition with BA.

In return for US government approval of the alliance, the UK has offered to conclude an "open skies" agreement with the US. However, differences in interpretation have made for difficult negotiations between the two countries.

The US and Germany concluded an open skies deal earlier this year. At the same time, Lufthansa and United were granted anti-trust immunity by the US authorities, allowing them to co-ordinate their operations more closely.

Other US airlines have said, however, that an open skies agreement is insufficient. It will not, they claim, solve their biggest problem in the UK – obtaining slots and facilities at London's Heathrow airport.

For the aircraft manufacturers, alliances have the disadvantage that airlines can reduce the number of aircraft they use by combining services. For example, BA says its alliance with Qantas of Australia means it

> Far-sighted airlines are preparing for the next downturn

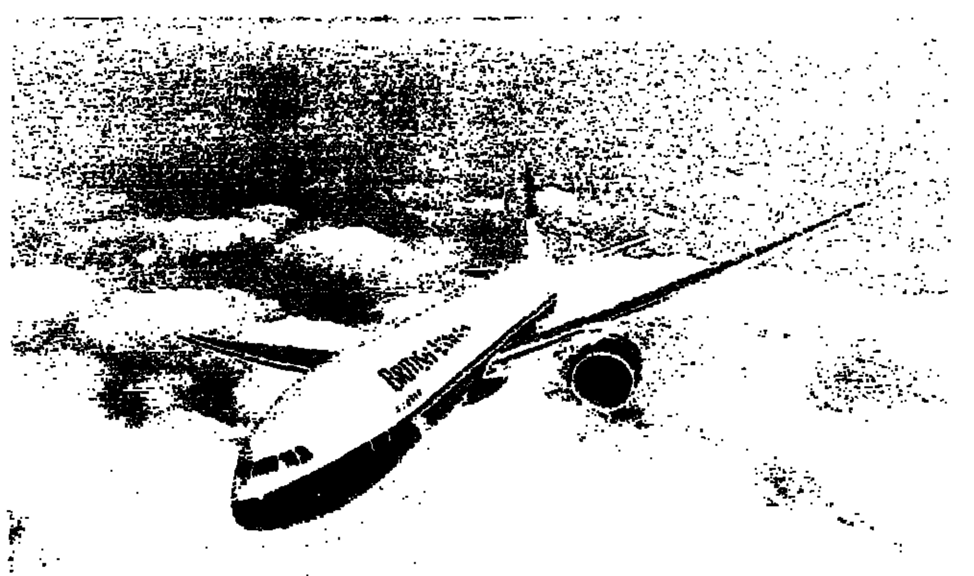
can use one Boeing 747 fewer on the UK-Australia route.

This sort of saving is unlikely to be a significant setback for the aircraft manufacturers, however, as the growth of air travel will mean airlines ordering new aircraft for other routes.

In addition, airlines in alliances are likely to want aircraft with similar interiors. The resulting move towards standardisation will cut aircraft makers' costs.

What the alliances mean for air travellers is more contentious. Mr Ian Hamer, chairman of the Air Transport Users Council of the UK says the increasing concentration of the airline industry gives his organisation "growing cause for concern". He says: "The council has seen little evidence of increased competition."

BA and American insist that their alliance will result in fares going down. Critics say the idea that the combination of two of the most powerful forces in an industry will result in prices falling flies in the face of established economic theory. But as the trend of airline fares is downward anyway, it is likely that the new alliances will be able to do little more than slow the long-term fall in prices.



Experiencing turbulence: British Airways' deal with American Airlines has caused controversy

PROFILE **Boeing**

Bottom line now rules

Aircraft enthusiasts have given way to businessmen at the top of airlines

Looking back on his years in the aerospace industry, Mr Frank Shrontz, the outgoing chairman of Boeing, says the most noticeable change in his customers, the airlines, is that they are now run by businessmen.

In the old days, they were run by aircraft enthusiasts, he says. There was one large airline which insisted that the switches in its aircraft move in the opposite direction from those of all other carriers.

Mr Shrontz, who expects to step down from Boeing in the next few months, says airlines today are run with an eye on the bottom line. Airlines want aircraft at low prices and are prepared to accept a higher degree of standardisation.

During his years at the head of Boeing, Mr Shrontz, who became chief executive in 1986 and chairman in 1988, has attempted to get Boeing to pay greater attention to the competitive environment in which it operates. He regards launching the process of changing Boeing's culture as one of the most significant achievements of his time as the head of the world's largest aircraft manufacturer.

He told his senior executives to look at how many companies which were once world leaders were no longer around.

He said that Boeing had to become more market-oriented, improve its manufacturing processes and persuade its shop floor employees to contribute to the process.

One of the difficulties he faced was that there did not seem to be an obvious threat to Boeing. "That made it much more difficult to do what we did," he says. "It was initially a tough sell. But then the

Philip Condit: the seventh head of Boeing since 1915

Frank Shrontz: airlines want aircraft at low prices

recession hit us and I don't think there were any nay-sayers about."

At the start of the recession in the early 1990s, Boeing sent its senior managers to Japan where they visited companies in other industries. These included Hitachi, the electronics group, Toyota, the car company, and Ricoh, the office equipment maker.

As a result of these visits, Boeing set itself the task of halving the amount of time between an airline placing an order and an aircraft being delivered. The company says it is now about halfway towards that goal.

The recession in the aircraft industry now appears to be over. Boeing's orders are up and it has increased its aircraft output. But the aircraft industry is a cyclical one. There will eventually be another downturn and Boeing will have to continue cost cutting if it is to compete.

Completing the task will be the job of Mr Philip Condit, who in April became Boeing's chief executive. He is only the seventh head of Boeing since it was founded in 1915.

Mr Condit headed the programme which created the Boeing 777, the company's most recent product, a twin-engined wide-body jet capable of carrying up to 400 people.

He will be in charge during the company's next large project – the creation of a stretched version of the Boeing 747. The extended 747 will carry over 500 people on two decks.

Several airlines have already expressed an interest in the aircraft. British Airways, Singapore Airlines, Virgin Atlantic of the UK and Lufthansa of Germany have said they may buy the aircraft.

Michael Skapinker

Boeing airliners

as of December 31, 1995

Aircraft	Ordered		Delivered
707/720	1,010		1,010
727	1,831		1,831
737	3,255		2,764
747	1,192		1,071
757	826		694
767	713		595
777	230		13
	9,057	Total	7,978

Source: Boeing

■ **Airports:** by Roger Bray

Big birds need big nests

Operators will have to make a large investment to cater for super Jumbos

The world's airport owners might, at first glance, appear to be sitting pretty. As environmental lobbying increasingly hampers expansion, demand for air travel threatens to soar far beyond supply. All they have to do is watch the money roll in.

It is not that simple. Airports have a critical mass, below which their operators dare not slip. If rivals develop while they stand still, airlines may be forced to abandon connecting flights for want of sufficient traffic – and business may fall away drastically.

But how can they expand? Runways are saturated with traffic. Building new ones means knocking down houses. And greenfield sites are as elusive as the Cheshire Cat.

The answer is bigger aircraft. Their average size is already increasing. Recent figures from Airports Council International for the first three months of 1996 showed that in each of the world's main regions passenger traffic growth far outstripped the average rise in the number of take-offs and landings. Size will increase even more dramatically when the coming generation of "super jumbos", planned by Boeing and Airbus and carrying 600 or more passengers, enters airline service early next century.

But airport managements cannot simply relax and wait for that to happen. To accommodate such giants, estimates ACI, they will have to spend over $100m on modifications. The benefits of greater seating capacity will be reduced unless flights are turned round more rapidly at terminals. If the new aircraft emerge as double deckers, it is possible that air bridges used for boarding and disembarkation at terminals will have to be built on two levels. Parking stands and taxiways will need to be widened and additional baggage handling and security equipment installed to cope with huge, simultaneous surges in traffic.

BAA, which owns London's Heathrow, is fortunate that it is planning a fifth passenger terminal just as the super Jumbo promises to become a reality. If approved, the £1.5bn ($2.3bn) project will expand the airport's capacity by some 30m passengers a year.

The company claims that increasing use of bigger, existing jets, will make that possible with or without the very large aircraft now proposed. But the timing of its development will allow it to accommodate them. This does not mean that other parts of the airport will escape upheaval, however. The greater wingspan of the super Jumbos will force a reduction in the total number of stands at existing terminals.

Ms Alison Livesley, a senior BAA planner, says: "We are planning on the basis that there will be a new large aircraft or a derivative of the 747-400. The most important factor is wingspan. The length of the aircraft must also be taken into account when we plan the depth of stands, but it is the distance from wing-tip to wing-tip that we must be most aware of. That measurement could be anything from the present maximum of 65 metres to 90 metres."

She adds: "All our European competitors are either already able to handle wingspans up to 90 metres or have a strategy to get them there."

BAA has begun work to the east of Heathrow's central terminal area, widening taxiways as well as stands. But the cost of such changes will amount to only around 20 per cent of the estimated sum of $500m airports will have to spend over the next two decades to cope with worldwide traffic growth averaging around 5 per cent a year.

Even if they do manage to keep up, it will be a frantic scramble. The Association of European Airlines, whose members include most of the region's largest carriers, forecasts that, within ten years, Europe's airports will be handling 600m more passengers and 7m more flights. – increases which would far outstrip any current plans to expand capacity.

Those plans include a third big airport close to Paris, the provision of more terminal space – and perhaps a fifth runway – at Amsterdam's Schiphol, a new, $2.6bn airport outside Athens, a $2.9bn expansion programme at Rome's Fiumicino and the development of Schönefeld to cope with increased travel generated by the re-establishment of Berlin as Germany's capital.

The transformation of eastern Europe will create increased demand for air travel, and with it the need to update airports. Expansion and refurbishment projects have been launched in Moscow, for example. Germany has agreed to provide around $34m to upgrade the outdated Rinas Airport in the Albanian capital, Tirana.

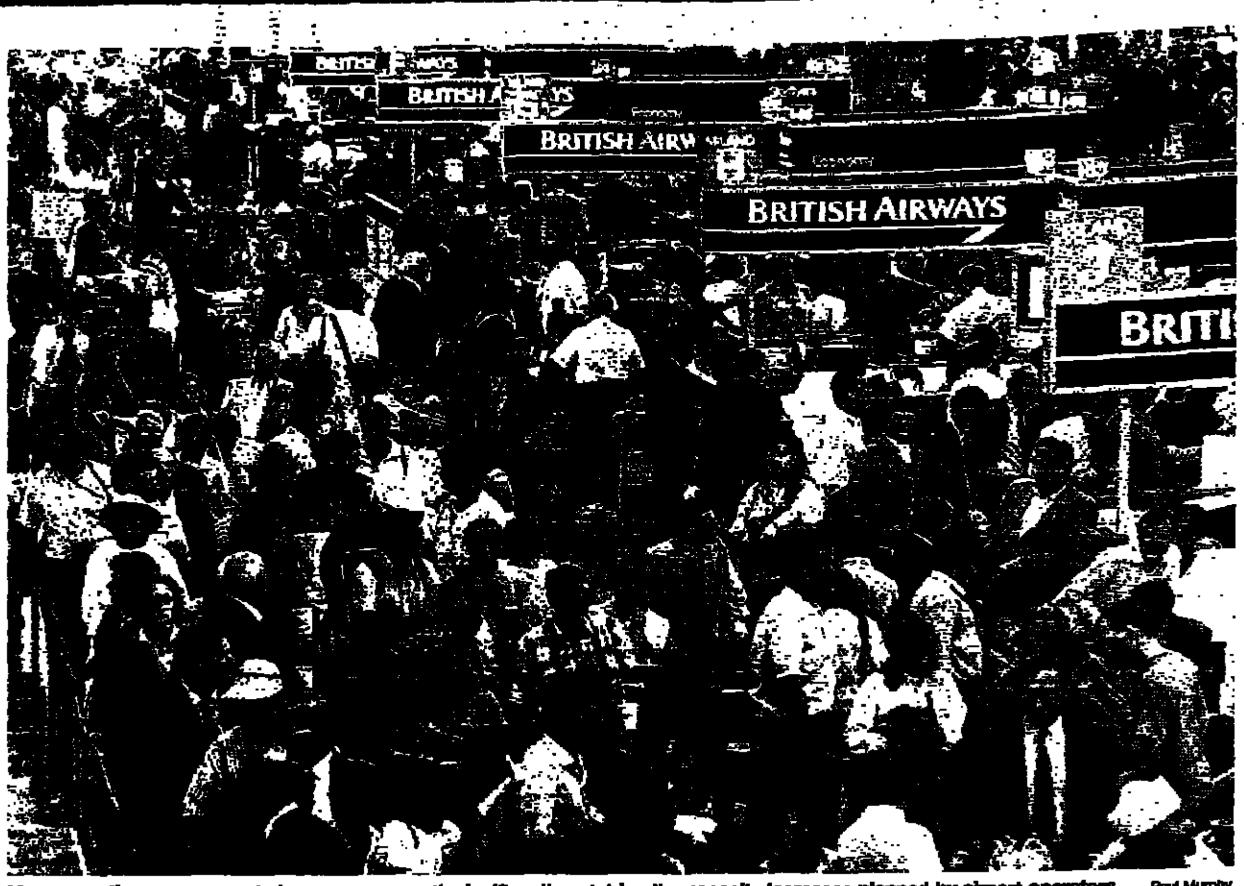
In the US eight big airports have launched projects worth a total of some $8bn. They include New York's JFK and Boston's Logan, both of which are planning to link terminals with "people mover" trains, and Seattle, which needs an extra runway to save airlines expensive diversions to Portland, Oregon when fog hits landings.

South Africa's state-owned airports operation plans to spend some $765m over the next three years to increase capacity.

But it is in the Asia-Pacific region, where traffic is growing fastest of all, that the most spectacular projects are under way. Hong Kong is forging ahead with the development of a replacement for Kai Tak on the island of Chep Lap Kok at a cost, including transport links, of some $20bn. Neighbouring Macau recently opened a new $1bn-plus airport. Seoul, which saw passenger traffic soar by 14 per cent last year is also undergoing huge expansion. And China, where air travel is growing by around 20 per cent a year, plans to spend over $3bn to triple its airport capacity by 2000.

Japan is the biggest spender. A five-year plan drawn up by the Transport Ministry lists projects costing over $40bn. These include extra runways at Osaka's Kansai International, a relatively young airport which is nevertheless almost full, and Tokyo's Haneda – and a third big airport for the capital, perhaps on an offshore site.

The building of Tokyo's Narita provoked some of the angriest confrontations ever witnessed between protesters and developers. The world's airport operators will need to tread warily if they are to prevent similar uproar. Environmental objections are certain to frustrate some of their expansion plans.



Masses on the move: expected passenger growth significantly outstrips the capacity increases planned by airport operators Paul Murphy

■ **Air traffic control:** by Michael Skapinker

Computers help plot safer courses

Flight crew and ground control will soon have to communicate by computer

At the air traffic control centre at West Drayton, near London's Heathrow airport, controllers chatter incessantly. Not to each other – they are far too busy for that – but to the aircraft above one of the busiest pieces of airspace in the world.

To an outsider, much of the radio talk is incomprehensible; the clipped replies of the pilots, many of whom speak English as a second language, even more so. The two sides understand each other well enough, however, to deal safely with the 1.5m flights crossing England and Wales each year.

But the world of the air traffic controller is changing. With the number of passengers a year expected to double to 2bn over the next two decades and the number of aircraft expected to grow commensurately, the radio is looking like an increasingly inadequate means of communication. For this reason, air traffic control organisations on both sides of the Atlantic are developing new systems that will allow more of the communication between ground and air to take place by computer.

As well as reducing the amount of talking that has to be done over the radio, this should diminish the possibility of misunderstandings due to language differences.

In the US, airlines, aircraft manufacturers and aviation organisations are working on Future Air Navigation Systems (Fans). These use telecommunications and computer systems to enable air traffic controllers and pilots to exchange data without speaking to one another. If, for example, severe weather means an aircraft would be better off flying on a different route, air traffic controllers would transmit this information to the crew electronically.

Another huge advantage of Fans is that aircraft plot their routes by satellite. Instead of using radar to determine position, Fans planes use the Global Positioning System (GPS), a network of 24 satellites set up by the US military. Since many countries do not have radar coverage outside large cities and travel over stretches of ocean is not covered by radar, the benefits of the GPS system are clear. When aircraft come into radar control after a transatlantic flight, they currently sometimes discover that they have miscalculated their position by up to five miles.

Satellite assisted navigation would also allow airlines to cut their journey times, making substantial savings in fuel. Currently, aircraft have to fly along designated routes, which are not necessarily the shortest ones. British Airways says that if it was able to fly the shortest route between London and Hong Kong, it could reduce the journey time by an hour.

The European system for computer-based communication between ground control and flight crew is called the Programme for Harmonised Air Traffic Management Research in Eurocontrol, or Phare.

> Transatlantic pilots often misjudge their positions by up to five miles

The programme, which began at the end of the 1980s and which is expected to run for another two years, is led by Eurocontrol, a 21-country organisation that helps to co-ordinate European air traffic control, and air traffic control organisations in France, Germany, the Netherlands and the UK.

Phare shares several features with the work being done in the US. The communications philosophy is the same: encouraging communication by data rather than voice.

A 32-year old Bac 1-11 aircraft is being used to test many of the systems that the Phare researchers believe will be common in the 21st century. The aircraft boasts an experimental flight management system that can generate a "four dimensional" flight path. Aircraft today can predict their flight paths in three dimensions – latitude, longitude and altitude. The fourth dimension, provided by the new flight management system is time: the system can predict when an aircraft is going to reach its destination.

Under the Phare programme, these predicted flight trajectories are sent to ground control via a data link. Ground controllers then use their system to see whether there is any danger of the aircraft's planned trajectory coming into conflict with that of any other flight.

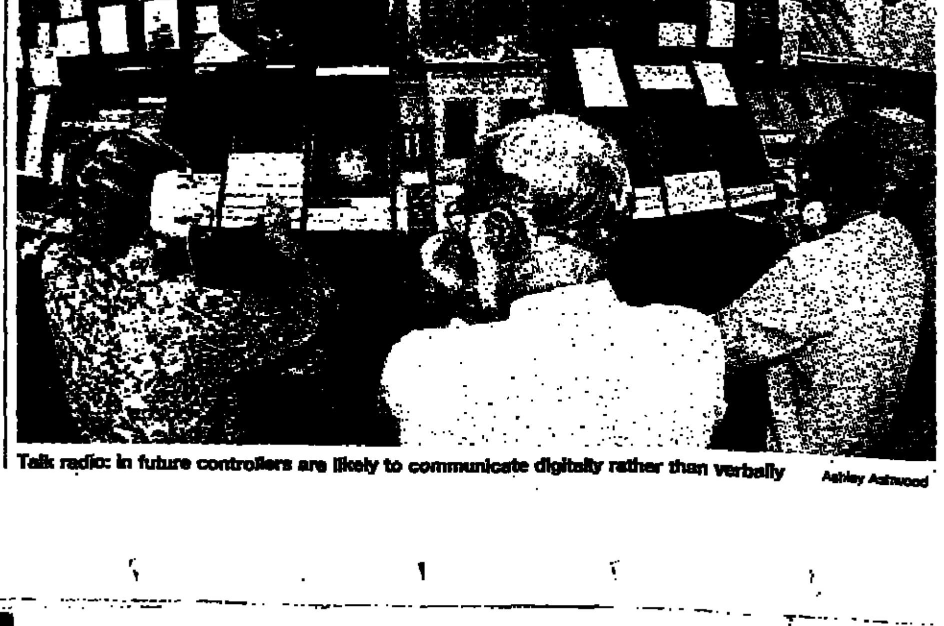
Various software tools allow the controllers to determine a safe flight path for their aircraft. There is a conflict probe, which is the tool that determines whether two flight trajectories will clash; there is a problem solver, which offers the aircraft an alternative trajectory if there is a conflict; and there is a flight path monitor, which tells air traffic control if an aircraft has deviated from its agreed route.

If it does appear that aircraft flight trajectories might be incompatible, air traffic control transmits the obstacles by data link to the aircraft. The flight crew then generates an alternative flight plan by entering the new data into a touch screen. The pilot also enters data such as remaining fuel.

If the new trajectory is within the aircraft's capabilities, the pilots transmits it back to air traffic control.

The first phase of the Phare project, which looks at how the systems perform during flight, is being supervised by the National Air Traffic Services in the UK. The next phase will be managed by German researchers, who will examine how the technology works during take-off and landing at airports. Finally, French and Dutch air traffic controllers will integrate the work of the first two phases.

Some aviation industry observers believe that these programmes will be insufficient to solve the airline congestion problems of the next century. What is the point, they argue, of increasing air traffic controllers' productivity and allowing them to handle many more aircraft than they do today, if runway and airport space remain limited? Airports and runways can be more intensively used, but, particularly in Europe, airports will eventually be full.



Talk radio: in future controllers are likely to communicate digitally rather than verbally Ashley Ashwood

صكنا من الاصل

rs help
courses

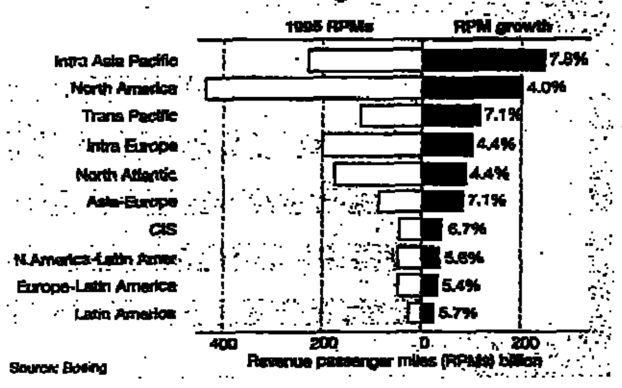
■ **Air misses:** by Roger Bray

European Union states must collide

The UK's solution to classic air safety problems must meet EU-wide approval

Britain's air safety regulators are concerned at the UK's number of aircraft straying from their assigned altitudes as flights multiply at leading airports.

Air travel markets: traffic growth 1996-2005



Source: Boeing

A recent report from the UK Civil Aviation Authority's safety analysis department showed that between 1993 and 1994, the number of incidents roughly doubled. And although it fell back again last year, the Authority remains worried.

To an extent, the UK is stymied by its inability to act in isolation from its European partners. Whatever technical changes it introduces must meet Europe-wide approval. This is likely to make setting new standards a slow process.

Not that identifying what needs to be done has itself been simple. A number of factors affecting safety are evident when examining cases of near air misses.

The CAA report followed a classic example. Two airliners stacking in a holding pattern as they waited to land at London Heathrow flew perilously close to each other over the Kent countryside after one of them, an Airbus A320, had descended prematurely from its allotted flight level. A subsequent investigation found that A320 crew had heard an air traffic control instruction to an aircraft in a separate holding pattern, and had believed it was addressed to them.

The investigating panel urged the CAA to consider fitting anti-blocking devices to existing and future transmitters and receivers – in the air and on the ground – to ensure that such confusion did not arise again. The Authority said it was looking into the idea and would consider whether to recommend such devices – or declare them mandatory – when its research was complete.

Simultaneous or blocked transmission, however, was a factor in only nine of 265 incidents of "altitude violation" recorded during 1994. The investigators also recommended continued work on short-term radar conflict alert systems to warn controllers when aircraft were moving dangerously close. Such equipment is already operational in the Manchester terminal manoeuvring area and is also on trial in the London equivalent.

But the solution that might appear most effective, the fitting of air-to-air systems that warn pilots directly if another aircraft is too near, remains fraught with difficulty. The CAA report found that human factors were mostly to blame for altitude "busts". The largest single cause was the failure of pilots to comply with ATC clearance which they had read back correctly. This was a contributory element in 165 of the 1994 total. In 40 cases crews had exceeded published altitudes during standard instrument departures. Mistakes setting altimeters helped to create 29 incidents; failure by controllers to spot errors when pilots read back instructions was a factor in 30.

Workload – on the flight deck or at the radar screen – played a part in 27 violations. The distraction of pilots or controllers, language difficulties on the flight deck and confusion over aircraft call signs were also sometimes to blame. Only in 38 instances were technical malfunctions a factor. Warnings are passed automatically from one aircraft to another by traffic conflict avoidance systems (TCAS). They flash various visual and audible signals on the flight deck, depending on the urgency of the situation.

In December, 1993, the Federal Aviation Administration made TCAS mandatory for all airliners flying through US airspace. The move forced airlines around the world to install it on over 5,000 aircraft. But the initial view of safety authorities this side of the Atlantic was that in Europe's crowded skies, hazards caused by spurious alarms might outweigh the benefits.

Upgrading a satellite-based flight management system

One crucial difference is that European air lanes and airport approaches are off limits to random private flyers. America's are not. Evidence from the 1994 CAA survey failed to demonstrate the case for copying the FAA ruling in Europe. Because aircraft flying to and from the US were already obliged to fit TCAS, many were entering UK airspace with the equipment operational. The equipment sparked warnings in 10 cases where jets had strayed to the wrong height. Six alerts had been false – four genuine. For all that, the CAA analysts decided that fitting it to commercial transport aircraft "should help to reduce the level violation occurrence rate and provide a significant safety benefit".

So if the CAA, at least, now believes that TCAS offers a net safety gain, why does the UK not go it alone? This, says the Authority, is no longer an option. Four years ago, the EU's safety authorities agreed to harmonise technical standards. Besides, it argues, the worldwide requirement for such systems proposed by the International Civil Aviation Organisation urges regional agreements rather than national initiatives.

Nevertheless, the CAA has been pushing along two Europe-wide efforts. One is a proposal that TCAS should be fitted to all fixed-wing, turbine engined aircraft with a maximum take-off weight over 15,000 kilos or carrying more than 30 passengers and registered in the 26 states (stretching beyond the EU) that are covered by the Joint Airworthiness Authorities.

The other, a Eurocontrol plan, channelled through ECAC (the inter-governmental European Civil Aviation Conference) is broader in scope. It envisages that all aircraft operating in the airspace of ECAC countries should be equipped.

International co-operation inevitably takes time, however. The target date for implementation of both proposals is a day when millions will be sleeping off the effects of a collision with the champagne bottle – January 1, 2000.

■ **Safety:** by Roger Bray

Cost cuts could kill passengers

The number of accidents this year has already raised serious questions

The analytical wizards of the UK's Department of Transport's Air Accidents Investigation Branch (AAIB) are not noted for colourful language. But an observation in their recent report on a serious maintenance lapse at British Midland reflected a concern widely expressed this year in far more emotive terms.

Firemen search the wreckage of a Boeing 737 that crashed near Coventry in December 1994

A Boeing 737-400 operated by the airline had made an emergency landing as plummeting oil pressure threatened a double engine failure. High pressure rotor drive covers – one on each engine – had been removed during engineering inspections the previous evening. They had not been put back. The relevant passage deals with the need for a more effective way of heading off the kind of maintenance staff shortage that contributed to the incident. Such a system, it said, "has become significantly more necessary in this era of minimum manning levels".

When a DC-9-30 operated by the low-cost US airline ValuJet crashed in the Florida Everglades in May, killing all 110 passengers and crew, many commentators wondered whether the incessant clamour for lower fares was exerting dangerous pressure on safety standards. Were airlines cutting corners to hold down costs? The British Midland report did not go so far as to suggest they were – but investigators waved the yellow card. The sharper the competition, the more alert airline managements and safety regulators needed to be.

Questions about the effectiveness of official monitoring were raised after both the ValuJet disaster and the British Midland scare, with the spotlight falling – for different reasons – on the Federal Aviation Administration in the US and the Civil Aviation Authority in Britain. It was with neat timing that the AAIB report emerged just as the CAA was explaining its decision to delegate greater responsibility for safety to airlines by ensuring that their procedures for spotting and correcting potential hazards was watertight.

The CAA may note with some pride that the risk of being killed while flying on a British-registered airliner is about as great as the danger of being struck fatally by lightning, but international statistics will make 1996 look a black year for air safety. The number of deaths in airline accidents during the first six months was the second highest, for the equivalent period, in a decade. Since 1987, the annual half year average has been 479. This year it topped 600. And the figures do not include the deaths of 230 passengers and crew aboard TWA's Flight 800 off Long Island in June.

This record has stirred anxieties other than those concerned with the impact of competition. The ValuJet aircraft was 27 years old, raising doubts about the safety of ageing planes. And the loss of a Turkish Birgenair Boeing 757, flying German tourists home from the Dominican Republic in February has revived fears of what one expert called a "flag of convenience culture" among charter operators.

Mr Michael Willett, the CAA's head of safety regulation, believes there is no need for concern purely on grounds of age. He says that checks – to which older aircraft are increasingly subject – already exist to eliminate hazards: "When people hear that an aircraft has been flying for 25 years, say, they think that is very old. But probably all that's left of that aircraft are the main spars and part of the fuselage. Everything else, including the undercarriage and engines, will have been replaced."

The Birgenair accident brought German calls for a European Union blacklist of countries where air safety is considered to fall short of standards agreed through the International Civil Aviation Organisation (ICAO). This would be similar to that operated under the US International Aviation Safety Assessment Programme. Although the UK Government has expressed scepticism, questioning the legality of such a scheme, the CAA is currently reviewing the way it oversees subchartering by Britain's leisure travel industry.

The authority notes that there is a big difference between superficial inspections of aircraft while they are parked on the ramp and detailed monitoring of flight operations. Worse still, the latter can be deficient thanks to a lack of trained personnel in the country of origin. Mr Willett cites the example of a jet from an African state which had no flight operations inspectors qualified to check it. Despite this failure to meet ICAO requirements, the airliner was maintained by a European carrier and the authority "could find nothing wrong with its safety".

The relationship between cost and safety is something safety regulators speak of guardedly, lest they should be seen to favour shareholders over passengers' lives. Yet it remains a brutal reality. Ironically, the TWA tragedy struck almost as the UK Defence Evaluation and Research Agency was confirming significant progress towards protecting airliners against terrorist bombs. It believes that by lining baggage holds with Kevlar – or shifting containers a few centimetres further from the aircraft's skin – it could prevent a bomb the same size as that which caused the Lockerbie disaster from instantly destroying an airliner, allowing the pilots to make an emergency landing. The drawback with the method is its cost.

The question of cost has also reared its head during consideration of water spray systems to suppress aircraft cabin fires. Fitting them retrospectively would be so expensive, Mr Willett believes, as to be unviable.

It is possible, however, that a requirement to fit sprinklers could be demanded as a condition for certifying the coming generation of very large airliners, carrying up to 800 passengers.

Two problems that seem more certain to be solved within the next 10 years are those of tired pilots and ground proximity warnings. The advent of ultra-long range airliners, including a planned version of Airbus Industrie's A340, could mean pilots spending more than 20 hours in the air. Studies have already shown that quality of sleep during in-flight rest periods is low, increasing the likelihood of fatigue. CAA researchers have come up with a small device which, worn on the wrist, would set off an alarm and wake pilots if it detected no movement for a set period. Video monitors that would detect eye movement remain a possibility.

Meanwhile, Willett believes the risk of airliners flying into mountains or hillsides could soon be greatly reduced. Computerised mapping will soon cover almost the entire world, automatically ensuring that airliners maintain safe altitude.

■ **Regional markets:** by Michael Donne

Competition creates new turbulence

The growing potential of pan-regional flights is proving difficult to exploit

Worldwide, a large future market is expected for jet airliners in the broad 100-seater category for short-to-medium haul regional flights. Various estimates have set it at around 2,000 aircraft by 2010, but the competition to win shares of it is so intense that it has already forced a restructuring of the manufacturing industry involved.

This restructuring, which is set to continue, is dominated by the emergence of international consortia as a means of reducing development costs and strengthening competitive market power.

The widely publicised collapse of Fokker of The Netherlands earlier this year was the most visible indication of the difficulties facing the manufacturers. Fokker's conundrum was how to reconcile high development costs, including those incurred in applying advanced technology to improve the performance of new designs, with a highly-competitive market's demands for lower operating costs.

Yet there may still be a place for a revived Fokker. The rump of that company, being kept alive to complete an outstanding number of new aircraft, including a batch of six Fokker 70s for KLM, this past summer has been the focus of interest from a number of would-be buyers, including one from Russia.

In the meantime, the Fokker Group's profitable components and maintenance division, Fokker Aviation, which services some 1,200 Fokker jet and turbo-propeller airliners worldwide, has been bought by Stork, a Dutch industrial group, from the receiver for $180.5m.

The need for restructuring in the regional aircraft sector was recognised in Europe some time ago by the creation of Aero International (Regional), or AI(R), by British Aerospace, Aerospatiale of France and Alenia of Italy. Into this group BAe contributes its family of four-engined Regional Jets (RJs), developed from the BAe 146, and also its Jetstream twin turbo propeller airliners, while the Avions de Transport Regional (ATR) combine set up earlier by Aerospatiale and Alenia contributes its ATR series of turbo-prop airliners.

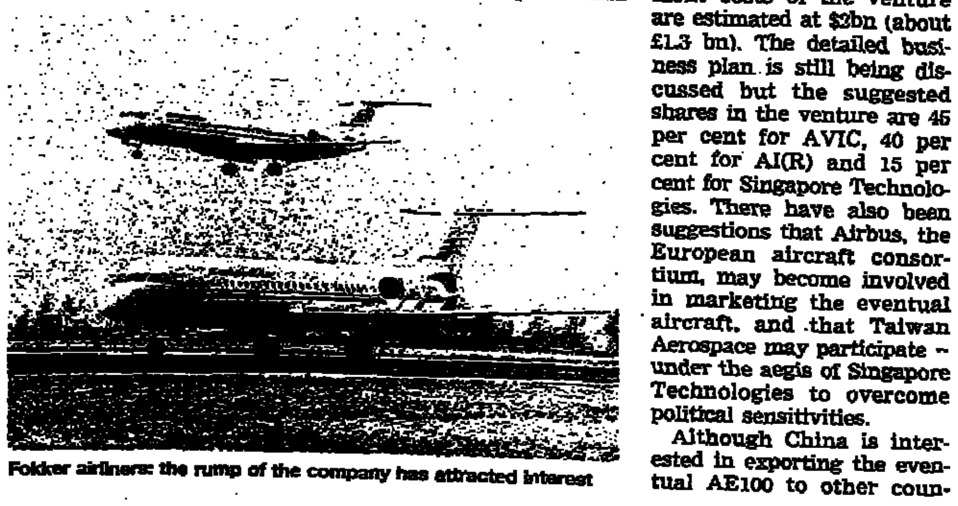
This combination already ensures for AI(R) a range of jet and turbo-prop aircraft variously seating from 20 to 115 passengers, and a 27 per cent share of the overall world market for regional airliners. AI(R) is also now studying the smaller 70-seat regional jet market with a view to competing with both the Fokker 70 and Bombardier Canadair's CRJ-X.

In the US, the Douglas Aircraft Division of McDonnell Douglas is now building the MD-95 twin-engined jet to replace its long-running series of DC-9s and MD-80/90s. The first MD-95 is expected to fly in the second half of 1998, and to evolve into a family of aircraft seating between 100 and 145 passengers, with various range/payload capabilities.

The biggest driving force in the world regional jet airliner market is the emergence of Asia-Pacific as the most significant new arena for sales and manufacturing. This stems from rising economic development throughout the region, in turn generating a widespread need for local short-to-medium haul air transport in many countries where terrain problems have hitherto made surface transport difficult.

Interest is strong throughout Asia-Pacific, but particularly in such countries as China, Indonesia, South Korea and Taiwan. It has been estimated that Asia-Pacific will account for some 40 per cent of world jet airliner sales of all types over the next 20 years.

It is China, with its vast area, its huge population, and its rising economic aspirations, that dominates. Recently, China has been intensively wooed by Western aerospace manufacturers, which have sought not only to sell their products into that vast emerging market but also to encourage it to share in development and manufacturing. McDonnell Douglas in particular has been closely involved with China in the development of its MD-90 series of "Trunkliner" aircraft for the Chinese market, and has a manufacturing base in Shanghai. The other leading jetliner manufacturers, Airbus of Europe and Boeing of the US, have also been very active.



Fokker airliners: the rump of the company has attracted interest

China has ambitious plans to develop its own family of aircraft, seating between 90 and 140 passengers and called the Asian Express 100, or AE-100, with Western aerospace industry support. The discussions have been extensive, and have at times included the possibilities of a Chinese association with South Korea (through the Korean Aircraft Development Corporation) and with Boeing of the US.

The KADC, however, fell out with China over production sharing, and political difficulties between the US and China this past summer were a big factor in China's eventual decision to work with the European AI(R) consortium. Aviation Industries of China (AVIC) signed a Memorandum of Understanding this summer with AI(R) and with Singapore Technologies, the third partner in the venture. Development costs of the venture are estimated at $2bn (about £1.3 bn). The detailed business plan is still being discussed but the suggested shares in the venture are 45 per cent for AVIC, 40 per cent for AI(R) and 15 per cent for Singapore Technologies. There have also been suggestions that Airbus, the European aircraft consortium, may become involved in marketing the eventual aircraft, and that Taiwan Aerospace may participate – under the aegis of Singapore Technologies to overcome political sensitivities.

Although China is interested in exporting the eventual AE100 to other countries in the region, considerable competition seems likely to emerge. The McDonnell Douglas MD-95 will be available; while Boeing remains a formidable force. The latter is discussing possible collaboration with the Japan Aircraft Development Company (JADC) and Bombardier of Canada on a 90-110 seater, which could either be based on Boeing's already highly successful short-to-medium haul 737 family of jets, or on a totally new design.

In Indonesia, the state-owned Industri Pesawat Terbang Nusantara (IPTN), which already builds smaller airliners such as the twin turbo-prop 50-70 seat N-250, is also now studying an 80-130 seat regional jet, the twin-engined N-2130. Indonesia's serious intentions of breaking into world markets, first with the N-250 and then later with the N-2130, if that project comes to fruition, are illustrated by IPTN's recent formation of American Regional Aircraft Industry (AMRAI). Headed by Mr Brian Rowe, the former vice-president of General Electric Aircraft Engines, AMRAI will market the aircraft throughout the Americas, and, according to IPTN's president, Dr Bacharuddin Habibie, who is also Indonesia's Minister of Science and Technology, will eventually see the N-250 assembled in the US. Furthermore, the South Korean KADC has not yet given up hope of becoming involved in the development of the broad Asia-Pacific 100-seater.

The situation is thus still volatile. The discussions that are a feature of establishing collaborative ventures in the world aerospace industry, and especially in such a region as Asia-Pacific, seem likely to continue. But there can be little doubt that with such massive potential, competition will remain formidable.

8 AEROSPACE

Europe: by Roger Bray

Chocks away in the EU

Low-cost operators are keener to exploit liberalisation than big carriers

Europe's airlines are about to escape from the last remaining shackles of protectionism. To those free marketeers who have been forced to swallow their frustration during two decades of painfully slow progress, it may seem a minor miracle.

From next April, carriers in the European Union will be allowed to operate unfettered domestic flights in other member states, opening new opportunities for low-fare travel. British and Dutch officials, in particular, may allow themselves a quiet moment of celebration, for it was their governments that blazed the trail, signing a liberal bilateral agreement in 1984. They may also reflect that response to liberalisation thus far has a whiff of Kafka about it, for the door has been pushed open but many airlines appear too timid to step through it.

The first package of liberalisation measures took effect as long ago as 1987, allowing any number of airlines to compete on routes within the European Community and overriding the insistence of some states that their flag carriers be guaranteed 50 per cent of the market.

The second wave of measures made little impact compared with the third package, which came into force with the single European market at the start of 1993. It gave airlines access to almost all international routes within the EU.

Big carriers, however, have scarcely taken advantage of the changes. The Association of European Airlines says that last year not one of its 26 members – they include most of the continent's leading carriers – had availed themselves of the new freedom. Developments resulting from the package continued to be patchy, it said. "This is obviously an indication of the difficulties in identifying new opportunities and successfully penetrating unfamiliar markets."

Richard Branson: a new entrant to low-cost EU flying Ashley Ashwood

But smaller airlines are proving nimbler. Low cost operators, on the pattern of Southwest Airlines in the US, are rapidly establishing a web of new routes with scant regard for national boundaries. They include Brussels-based Virgin Express, Debonair in the UK, and Ireland's Ryanair.

Virgin Express is the new name for Euro Belgian Airlines, acquired this year by entrepreneur Richard Branson. As the Farnborough Air Show gets under way on Monday, it will launch services between Rome and Madrid.

Debonair already flies between Munich and Barcelona. It also operates between Dusseldorf and Munich, though at present it is allowed to sell only a proportion of seats on each flight to domestic travellers. Ryanair's operation between London and Scotland is similarly restricted. In April, however, those restrictions will be lifted.

One of the main reasons why small airlines, rather than large, established carriers, are benefiting from the third package is a continuing scarcity of slots at Europe's busiest airports. Flag carriers remain reluctant to split their operations. The low-cost newcomers are less devoted to interlining and do not necessarily need to use the most congested hubs.

A Europe-wide regulation on the allocation of slots took effect in February, 1993. This confirmed the long-standing principle of grandfather rights, under which a carrier which holds a slot for a season has first claim on it for the equivalent period of the following year.

It allowed airlines to exchange slots but permitted governments to protect them for certain domestic services. And it made two gestures in the direction of new market entrants – the first by creating a pool of new, unused or returned slots, of which half would be available to newcomers, the second by warning that airlines would lose slots if they failed to use them for 80 per cent of the time allotted.

But it did not include a mechanism, demanded by many, which would oblige big carriers to relinquish slots to make room for fresh competition. Those who argue that the regulation does not go far enough will point, in evidence, to developments since 1993. Though Virgin Express operates from Brussels' main Zaventem airport, it ran into problems getting slots at all the destination airports it now serves.

A spokesman says: "We decided to use Ciampino in Rome rather than Fiumicino, partly because it is more pleasant and less crowded – but also because we could get better take off and landing times there. That choice was made possible by the fact that our operation is not dependent on interlining traffic."

Debonair has based itself at London's Luton Airport, best known as a jumping-off point for charters, and its destination airports include Monchengladbach, which is known as Dusseldorf Express and is an alternative to Dusseldorf's principal airport. Another new, low-cost operator, easyJet, has also chosen Luton as its hub. And while Ryanair also flies from Gatwick, most of its UK operations are from London Stansted and a range of provincial airports.

Like their US counterparts, these airlines generally offer minimal in-flight catering and easyJet takes only direct reservations. But some observers doubt that they will experience the same phenomenal expansion. Between 1988 and 1995 in the US, passenger numbers in markets served by low-cost operators tripled to more than 100m, while they fell elsewhere.

Pressure on airport capacity is not the only reason such explosive growth is unlikely here. The higher cost of operating in Europe – including bigger fuel bills – makes it more difficult to compete with rail and road travel.

But at least Europe's low-cost carriers can look forward to wider horizons. Liberalisation has put pressure on non-EU Governments around the Mediterranean to follow suit.

Earlier this year the AEA said it would like countries such as Tunisia and Israel to join a "Euro-Mediterranean free trade area". Airline operating costs in Europe are higher than in the US. But if the American experience is any kind of guide, the passenger will benefit. In the US, low-cost carriers have dragged down the overall cost of flying by up to 40 per cent.

PROFILE McDonnell Douglas

Dispirited of St Louis

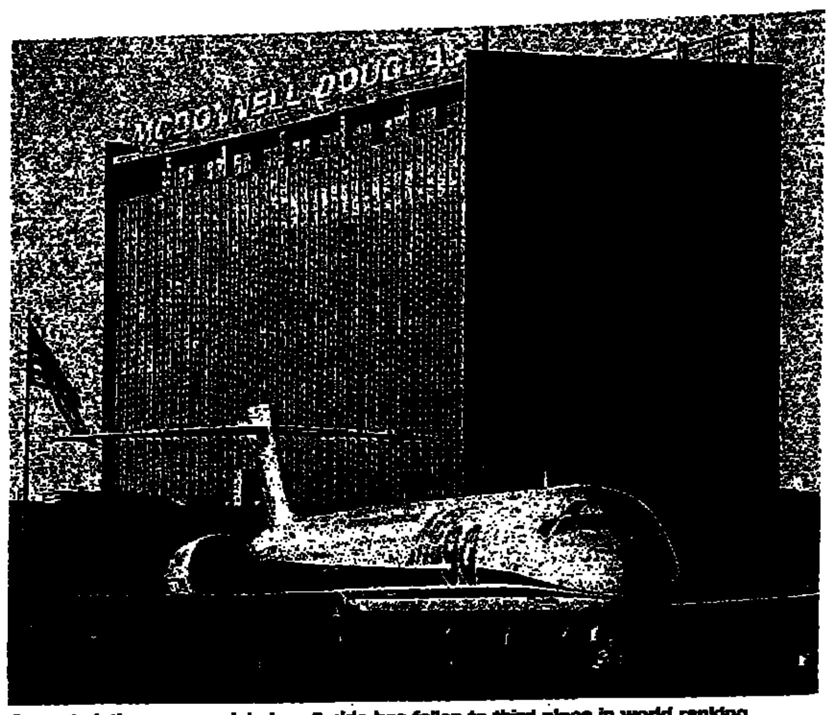
If Boeing is the unchallenged belle of the aerospace ball, McDonnell Douglas is something of a wallflower.

The Seattle-based world industry leader waltzed off with a deal to take over $3.2bn-worth of Rockwell space and defence assets earlier this month, leaving its St Louis rival still partnerless.

Reports swiftly surfaced that McDonnell was negotiating with Raytheon, a group strengthened by last year's purchase of E-Systems defence electronics and the more recent acquisition of complementary operations from Chrysler.

But just as McDonnell had refused to discuss earlier talks with Boeing and Rockwell – or indeed its involvement in any of the merger manoeuvres that have shaken out the US industry in the past three years – the company remained silent and, outwardly, calm.

Mr Harry Stonecipher, chief executive, emerged briefly from purdah earlier this month to announce that he was in the market to buy. He had the financing capacity for a deal worth "$5bn or $6bn". He was especially interested in communications, avionics and missiles, and he had no intention of selling any assets, he added.



Grounded: the commercial aircraft side has fallen to third place in world ranking

Despite the conventional wisdom that in an era of shrunken defence budgets, sheer scale is the *sine qua non* for suppliers, he pointed out that McDonnell's relatively modest interests in missiles and helicopters, for example, were "very profitable".

Cost-cutting and restructuring measures introduced by Mr Stonecipher since he took charge two years ago have improved profitability, but key issues facing the group have yet to be resolved.

McDonnell remains the largest and most successful US supplier of military aircraft, but its status and competitiveness in other sectors have suffered in the shake-out prompted by recession and the end of the arms race. By virtue of its acquisition of Martin Marietta and the more recent purchase of Loral, Lockheed is now the biggest US defence industry supplier.

Its status was underlined in July when Washington awarded the group a contract worth almost $1bn to build a prototype, reusable new-generation space shuttle, dashing the ambitions of McDonnell and Rockwell.

Meanwhile, Douglas, McDonnell's $4bn-sales commercial aircraft division, has tumbled to an undistinguished third place in the world rankings, lagging further behind Boeing and overtaken by Europe's Airbus Industrie, with a market share of some 10 per cent, compared with 22 per cent when recession struck at the turn of the decade. Douglas delivered 50 aircraft last year compared with 169 in 1991 while its workforce was slashed from 36,000 to 11,000.

It was this decline that spurred talks on a possible link with Boeing earlier this year, and which continues to threaten the group's future in jetliner manufacture.

Douglas is scrambling to keep aloft its newest commercial aircraft, the 100-seat MD-95, whose projected launch customer, Valujet, was forced to suspend operations earlier this summer after a crash in the Florida Everglades. Although the low-cost operator is expected to resume flying shortly, prospects for its future – and that of the $1bn order – remain clouded.

The company, which last year saw its original MD-95 launch customer – Scandinavian Airlines System – turn instead to Boeing's 737, has lobbied hard in Washington to have Valujet cleared. It is also hot in pursuit of new orders from Northwest and Continental, both long-time operators of DC-9 aircraft dating from Douglas's happier past.

But if the operation's prospects of a happier future depend partly on reclaiming ground and confidence lost by the misconceived MD-11 and the troubled MD-95, they depend even more on the military divisions' ability to continue generating profits to finance recovery.

One potential source is the grand prize available to the winners of the current Pentagon competition for the Joint Advanced Strike Technology fighter project which, including foreign sales, spares and training contracts, could be worth up to $750bn over the aircraft's life.

McDonnell, in partnership with British Aerospace and Northrop Grumman, is confronting two other groups – one led by Lockheed and the other by Boeing.

The field is due to be trimmed to two in October shortly before the presidential election. By then McDonnell Douglas may well have found itself a defence industry acquisition big enough to put it on an even footing with Lockheed. And if Boeing's relative lack of military expertise tells against it, as some observers suggest, the run-off will establish unequivocally which of the remaining rivals can lay claim to the title of Top Gun.

Christopher Parkes

PROFILE Airbus

Four into one will go


A scale model of the Airbus A340 undergoes wind-tunnel testing

On a July afternoon in Paris the supervisory board of Airbus Industrie put an end to a debate which had preoccupied Europe's aircraft makers for years. Airbus, the board said, would become a company.

To casual observers of the aerospace industry the news must have seemed puzzling. What has Airbus been during the 26 years of its existence if not a company?

The answer is that it has been a federation of four of Europe's leading aerospace manufacturers, which makes decisions, and aircraft, on the basis of consensus. As a *Groupement d'Intérêt Economique*, a French legal construct, Airbus makes no profits or losses. These accrue to the companies which own Airbus: Aérospatiale of France and Daimler-Benz Aerospace (Dasa) of Germany, each of which own 37.9 per cent; British Aerospace, which has 20 per cent; and Casa of Spain which has 4.2 per cent.

Several senior executives in these companies have been opposed to change: why, they asked, interfere with something which so obviously works? Airbus is the second biggest aircraft maker in the world after Boeing of the US. It has ensured that the four partner countries have remained at the leading edge of the aircraft business.

In the first half of this year, Airbus won 143 orders from 15 customers, more than it received in 1995. The consortium said this was a 37 per cent share of the world market for aircraft with more than 100 seats.

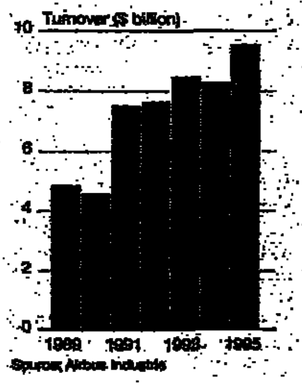
Airbus's biggest success recently was to win an order from China for 30 single-aisle A320 aircraft and three wide-bodied A340s. The order virtually doubled Airbus's market share in China, hitherto a Boeing preserve. It also recently won an order for 45 aircraft and 45 options from General Electric Capital Aviation Services, the leasing arm of General Electric of the US.

For all its success, however, all four companies eventually came to accept that Airbus had to change. Not only was decision-making cumbersome but Airbus was also bound to award manufacturing contracts to its four partners in proportion to their shareholdings.

This meant that partner companies were doing manufacturing work which could have been done more cheaply by aerospace companies elsewhere – in Asia, for example. An early proponent of change was British Aerospace. This was unsurprising as the UK company had done more than the other partners to cut its costs.

Deciding to become a limited company, while a step of great significance, was easier than the decisions which the four partners will have to make now. They have given themselves three years to decide what sort of company Airbus should become.

Airbus Industrie



Source: Airbus Industrie

There are several alternatives. One would be for the partners to put all their Airbus manufacturing facilities into the new company. This would mean, however, that those facilities would have to be valued and the partner companies' shareholdings adjusted to take account of the results. This could mean British Aerospace winning a greater stake in Airbus at the expense of the other two large partners.

Apart from the discord this would cause, it would leave Airbus committed to using the manufacturing facilities it has at its disposal now, rather than having the ability to look for cheaper alternatives.

Another solution would be for Airbus to become a design and marketing company, which puts component manufacturing contracts out to competitive tender. This would have the advantage of enabling the new company to look for lower cost sources of supply. It would also avoid a damaging argument among the partners on what their relative shareholdings should be.

Michael Skapinker

■ **China:** by Tony Walker

Calm before the returning storm

Beijing's plans for infrastructure mean Chinese activity is once again frenzied

China's aviation sector may have witnessed something of a slowdown since 1992-1995 when the country experienced an explosion of activity with the formation of more than a dozen regional airlines and dramatic increases in passenger and freight traffic but, after the consolidation of the past 12 months, the industry is set for another surge.

A freeze on the purchase of new aircraft is being lifted, negotiations are at an advanced stage for a project to build a 100-seater passenger aircraft, and China's ninth five-year plan (1996-2000) includes an ambitious programme for the construction of new airports and the upgrading of existing facilities.

China will also continue to be a leading purchaser of new aircraft as its national and regional airlines complete modernisation programmes. The $1.5bn agreement signed in April for 33 Airbus aircraft, including 30 150-seater A320s, is part of this process.

The country also has an agreement pending with Boeing for some 20 new aircraft at a cost of between $1bn-$2bn. Political tensions between Washington and Beijing over such issues as Taiwan and trade, may have stymied the deal for the time being, but Boeing remains confident.

The announcement in July that China had selected a European consortium for its planned 100-seater regional jet project represents a significant step towards the development of an indigenous aircraft industry. Negotiations with European partners are proving complex, however, and Beijing may be hard put to meet its timetable of having such a feeder aircraft up and flying within five years.

> Beijing is pushing ahead with ambitious plans to improve its airport network

China's aggressive pursuit of Airbus Industrie as a partner could prove something of a complication since it will require a renegotiation of the agreement reached with the European consortium, which includes Aerospatiale, British Aerospace and Alenia of Italy. Agreement with Airbus would mean that Daimler-Benz of Germany and Casa of Spain, both Airbus Industrie partners, would also be drawn into the project.

Beijing wants Airbus included so that the plane can be compatible with other elements of the Airbus fleet. "We want the A-100 to share certain features with Airbus planes so as to benefit the end users," says an official of Aviation Industries of China (Avic), which is expected to take a 45-50 per cent share, with the Europeans and Singapore Technologies Aerospace holding 40 per cent and 10-15 per cent respectively.

Along with its plans for new aircraft purchases and the development of a home-grown aerospace sector, Beijing is pushing ahead with improvements to its airport network, which falls well short of the requirements of one of the world's fastest-growing markets.

China plans to spend Yn73bn ($9bn) in the next five years on airports, including Yn9bn in 1996 – the first year of the ninth five-year plan. Beijing plans to "reconstruct" 40 of its 132 airports during the plan. High on the list of priorities is the upgrading of facilities in Beijing, where the terminal building designed for 5m passengers, is groaning under the burden of 12-15m passengers annually.

Work began last October on a new terminal with a capacity of 30m passengers a year. To be completed in 1999, it will cost between Yn7bn-8bn. China is also planning to relocate airports further from city areas, and build new ones. Guangzhou airport may be moved, and, in Shanghai, a new international airport is planned for the Pudong special economic zone on the east bank of Huangpu river.


Infrequent fliers: China has only 400 commercial jets Camera Press

Commercial air traffic, according to the Civil Aviation Administration of China's (CAAC) annual report, is expected to soar to 14bn tonne-kilometres by 2000, a doubling from the 7.1bn tonne-kiometres and 51.1m passengers of 1995. That anticipates a slower annual growth rate in traffic of about 15 per cent compared with the 22.3 per cent recorded in 1995.

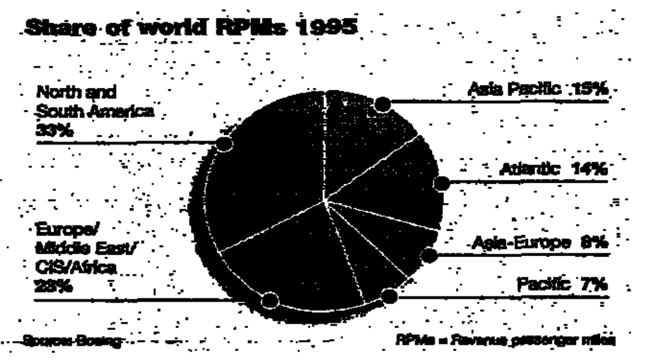
But industry analysts say that for China's aviation sector to become more competitive internationally it will need to improve its aircraft utilisation rates – the measure by which the industry gauges the efficiency of airline operators. Chinese utilisation at 5.8 hours per day in 1995 is about half that of Asia-Pacific airlines such as Qantas, the Australian carrier, whose rate is 11.

Boeing estimates that China's requirements, including those of Hong Kong, for new passenger aircraft in the next 15 years will be worth $140bn, making it the third biggest aviation market in the world.

China has 400 commercial jets in service, of which about 200 are Boeings. Numbers of commercial aircraft are expected to rise to 640 by 2000, and to 800 by 2010.

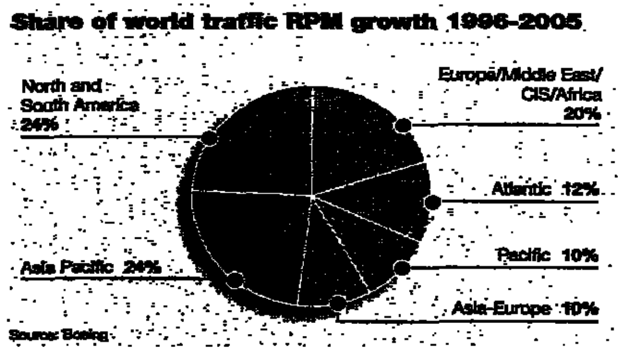
An indication of the scope for further explosive growth in China's aviation sector is the fact that passenger usage rates by international standards are still extremely low. Air journeys in China are a minuscule 0.02 per cent compared with 2.5 per cent in the US. It is forecast that journeys per capita will rise to 0.2 per cent within 10 years. In China's aviation sector only the sky, it seems, is the limit.

Share of world RPMs 1995



Source: Boeing
RPMs = Revenue passenger miles

Share of world traffic RPM growth 1996-2005



Source: Boeing

■ **Arianespace:** by David Owen

Launch flop is bad omen

Competition and a failed launch are troubling market leader Arianespace

June 4, 1996 was a black day for the European space industry. It was the morning the new Ariane 5 rocket exploded 40 seconds into its maiden flight from the European Space Agency's launch centre in French Guiana, throwing into doubt Europe's hard-won leadership of the $3bn-a-year commercial space transport industry.

In the 16 years since it was incorporated, Arianespace, a France-based 53-company consortium, has grown into the world's leading satellite launcher, with about half of a market once dominated by the US. Twelve of the 23 commercial satellites launched in 1994 were propelled by Ariane launchers. Last year, the figure was 13 out of 26.

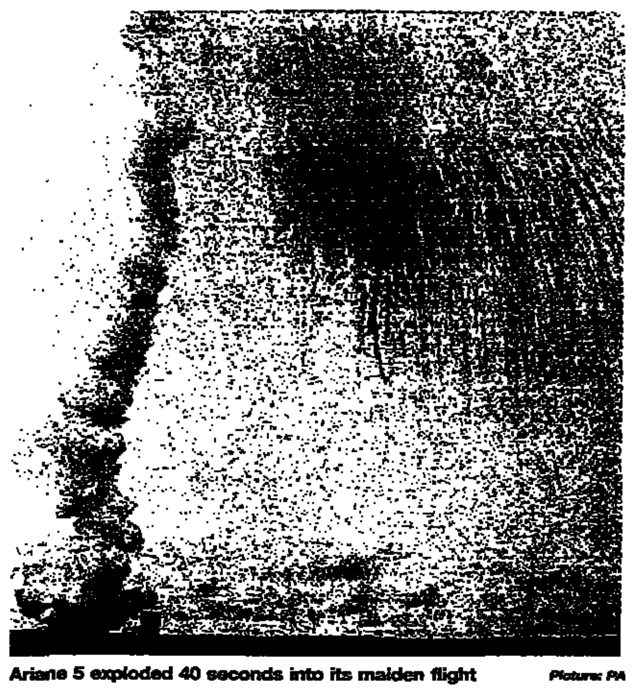
But now the US – and others – are threatening to hit back. Over the next few years, Arianespace will face increasing competition from a string of new challengers around the world. These competitors include:

- International Launch Services, a joint venture formed by Lockheed Martin, the US defence company, and two Russian groups, Khrunichev Enterprise and RSC Energia.

Lockheed Martin makes the Atlas launcher, 11 of which were launched successfully from Florida last year. The Russian companies offer the larger Proton, which is launched in Kazakhstan and has been at the heart of the Russian (and Soviet) space programme for 30 years.

By joining forces, the new alliance hopes to market both launchers around the world.

- McDonnell Douglas, the US aerospace company, is developing the Delta III, a rocket similar in size to the Atlas, designed to carry twice the payload of its predecessor, the Delta II. The first launch is planned for 1998.



Ariane 5 exploded 40 seconds into its maiden flight Picture: PA

- Boeing, the largest US aircraft maker, has teamed up with RSC Energia of Russia, Kvaerner of Norway and NPO Yuzhnoye of Ukraine in the innovative Sea Launch venture. This aims to launch satellites from a platform in international waters in the Pacific, with the first launch due in late 1997 or early 1998.
- Lockheed Martin is also developing a new rocket, the Atlas IIAR, with a planned launch date of 1998.

With Chinese and Japanese satellite launchers also available, it is starting to look as though the market in years to come will be distinctly crowded.

Arianespace is relying on the Ariane 5 – developed at a cost of more than $7bn – to retain its competitive edge into the next century. It believes the new rocket will offer improved reliability, the capacity to carry larger payloads and lower launch costs.

The ability to carry heavier payloads is vital to Arianespace as satellites become larger and more complex. When it eventually enters commercial service, the Ariane 5 should be capable of launching two satellites with a combined mass of 5.9 tonnes (or one satellite weighing 6.8 tonnes) into geostationary orbit 22,000 miles above the equator. With the average telecoms satellite now weighing three tonnes, this capacity is crucial if the group is to continue launching two satellites at a time. Ariane 4, the rocket on which Arianespace's success in recent years has been founded, with its payload of 4.8 tonnes, is simply no longer big enough.

For small satellites needing to be placed in low orbits, meanwhile, Arianespace and Aerospatiale, the French aerospace group that acts as industrial architect for the Ariane launchers, recently agreed to set up a joint venture with two Russian partners – RKA, the Russian space agency, and Samara. To be known as Starsem, the venture will take charge of the commercial operation of Soyuz launch vehicles.

Arianespace probably still has a bit of time to get things right on the Ariane 5. Most observers expect the number of satellites launched each year to increase steadily until around the end of the decade, spurred by sustained demand for new telecoms and TV services and the need to replace satellites put up in the 1980s. Early in the next century, however, some analysts predict a temporary decline in demand which could mean problems for the least reliable or cost-effective launchers.

Seen in this light, the findings of the independent inquiry board into the failure of the first Ariane 5 mission – disclosed at a July 23 press conference at the European Space Agency's headquarters in Paris – will have come as something of a relief.

As Mr Jean-Marie Luton, the ESA's director general, pointed out, the board's report said nothing to suggest that fundamental flaws in the system architecture of the rocket had contributed to the explosion. Rather, it called into question a management culture that appeared to assume that since a component – in this case the rocket's inertial reference system (or navigational guidance mechanism) – functioned perfectly when fitted to the Ariane 4, it would necessarily do likewise on the Ariane 5. This should be comparatively quick – and inexpensive – to put right.

Mr Luton put the cost of the failure at between FFr800m and FFr1.6bn, ($157m to $314m), 2-4 per cent of the already huge investment made in the rocket.

Since Arianespace officials say they do not yet know whether even the third Ariane 5 mission, let alone the second, will carry a commercial payload, the new launcher's entry into commercial service may be delayed many months beyond the January 1997 date the organisation had been planning on before the ill-fated maiden flight.

With so much competition looming, albeit in an expanding market, Europe's space industry – long regarded as an unmitigated, if expensive, success story – cannot afford another failure. The tension in the run-up to the second mission promises to be almost unbearable.

■ **In-flight entertainment:** by Amon Cohen

Budgets hit stratosphere

Ever-choosier buyers are spending big sums on systems to amuse clients

In-flight video systems are the focus of fierce competition

In-flight entertainment is one of the most competitive battlegrounds in commercial aviation, as a recent writ from United Airlines proves. United is suing GEC-Marconi InFlight Systems for breach of contract, alleging that the in-flight entertainment system the avionics company provided for the carrier's new Boeing 777 airliner does not meet agreed specifications.

Meanwhile, Virgin Atlantic has announced that it is switching the order for its in-flight system from Hughes Avicom International to Matsushita for aircraft currently on order. Both airlines are disappointed that the system they originally chose has not delivered them interactive capabilities, such as arcade-style computer games and the ordering of duty-free goods.

Above all, they have not got their hands on what Mr Steve Harvey, managing director of software company Inflight Productions, describes as "the Holy Grail" of in-flight entertainment: video on demand. This allows passengers to watch films in their own time, starting and stopping them when they please. "It means that if you want to rewind because you fell asleep or pause because you want to visit the loo, you can," says Mr Harvey.

Airlines have been both promising and promised video on demand for almost five years. United trumpeted this facility as part of its pre-launch fanfare for the Boeing 777, which it introduced last summer. Virgin had hoped to offer an interactive system as long ago as 1993. The airlines are still plugging away at the idea, although Virgin manager of in-flight entertainment Ms Lysette Gauna says it is a distant dream. "I think we are a good 18 months to two years off before we can offer it," she says.

British Airways is a little more hopeful and was due to start trials on one of its aircraft earlier this month although it is not confident enough to state a likely launch date. The only carrier still prepared to stick its neck out is Singapore Airlines, which is holding to its claim earlier in the year that it would have video on demand by the end of 1996.

If SIA is true to its word, it will steal a march on rivals – and take everyone by surprise. "I give them about a 5 per cent chance of introducing video on demand this year and a 50 per cent chance next year," says a source at an avionics hardware company.

> The main problem seems to be finding a suitably rugged system

The problem with video on demand is that it requires a wholly new technology. At present, on-board films are broadcast throughout the cabin from a central video player using cassettes. Video on demand is based on films being encoded digitally and stored on an individual PC in each passenger seat.

With fewer mechanical parts involved and no tapes to get chewed, that should theoretically make the process less liable to break down. The reality has been different. "It is proving a lot more complex than on the ground, though they can get it to work in laboratory conditions," says Mr Harvey. The main problems appear to be finding a suitably rugged system to withstand an aerial battering and compressing the digital film files to a sufficiently small size.

While the avionics companies struggle to find a solution to these difficulties, the airlines are compromising by introducing interactive systems without video on demand. SIA, for instance, offers 22 channels of video entertainment, plus a selection of ten Nintendo games, 12 channels of audio and even a Reuters text news service, updated hourly.

New Virgin aircraft will have a similar offering from next February, minus the text service, but with a facility for gambling. So too, at an unspecified date, will BA, which also promises on-board shopping and reservations facilities.

The slowness of progress toward video on demand illustrates the growing importance of in-flight entertainment in airline strategy. As anyone who has sat through second-rate movies on an airliner knows, entertainment is often an afterthought.

Virgin Atlantic is widely credited with having galvanised the industry in the early 1990s. As a small airline, it could not offer a huge fleet and a frequent timetable, so its marketing efforts were concentrated on creative, award-winning programming and innovations such as Sony video Walkmen.

With most airlines flying the same aircraft and offering the same legroom, they now find that the best way to differentiate their product from that of competitors is to offer superior entertainment. As a result, entertainment is one of the main airline marketing battlegrounds of the 1990s.

"In-flight entertainment budgets are going up and up," says Mr Steve Harvey of Inflight Productions, whose clients include Virgin, BA, SIA and Cathay Pacific. "For many years, they were in thousands of pounds, then they went into hundreds of thousands and now they are in millions."

This hyperinflation has led to a quest for better technology. "Airlines used to install technology which was fairly mature. Now what they are installing is at the front end of the market," says a source at a leading avionics company. "With intense pressure on them to build bigger and better systems, there was pressure on avionics companies to promise something they could not necessarily deliver.

Additional problems lie ahead. " Where are you going to get the space to cram all these functions into the seat?" asks the avionics source.

As the fretting over video on demand continues, the aviation industry is looking ahead to the next big development, which could be live television. Delta Air Lines plans to launch an experimental satellite link which would allow passengers to watch CNN and a variety of other television stations.

PROFILE **Harry Stonecipher of McDonnell Douglas**

Boss who appals unionists appeals to the Pentagon

Thirty years' experience of aerospace industry cycles, a politician's deftness, and armour-plating as stout as that under a fighter-pilot's behind are serving Mr Harry Stonecipher well.

The 60-year-old chief executive of McDonnell Douglas, who spent some 25 years in General Electric's jet engine division, had his first chance to demonstrate his qualities to a broader audience during a brief spell at defence supplier, Sundstrand.

Appointed chief executive in 1989, he moved quickly to settle damaging Defence Department claims of persistent over-charging and – earlier than most in the industry – cut the workforce by more than a quarter.

He renewed his communications with the Pentagon to good effect almost immediately on taking charge at McDonnell two years ago when the group's much-delayed C-17 transporter aircraft project appeared to be in a fatal stall.

Despite political and technical opposition, the C-17 has since accumulated federal orders worth about $18bn for McDonnell, reinforcing the lifeline the group's military revenues provide for its troubled civil aviation business.

As for his armour-plating, it has shown no signs of being dented during a protracted stand-off with more than 6,000 striking engineering workers angered by the group's relentless search for cost-savings through out-sourcing component manufacture to cheaper suppliers.

Using temporary help and enlisting white-collar staff, production has been maintained at the affected St Louis factories, causing little apparent short-term damage. First quarter earnings rose 25 per cent this year and the company has said it expects record results at least for the following two quarters.

The C-17 is reckoned to have saved some 20,000 direct and indirect jobs.

Despite being the first non-family member to run the group (he replaced Mr John McDonnell), Mr Stonecipher has adopted an almost proprietorial role in his efforts to set the group to rights. Apart from his intensive lobbying in Washington, he is reputed regularly to lead sales and marketing missions to

Harry Stonecipher: settled claims of over-charging

airline customers.

He has rooted out entrenched management layers, especially in marketing, and promoted younger talent.

With rare exceptions, Mr Stonecipher has restructured group management from in-house resources. He has not hesitated, as his predecessors did, to switch executives between the group's mainly military base in St Louis to its Douglas division's civilian operations centre at Long Beach, California.

One of the first of his few reported opinions after joining the group was that the merger 30 years earlier of the McDonnell and Douglas companies had never actually been consummated. Task forces were set up to set matters to rights.

This integration process reached a logical peak earlier this year when Mr Michael Sears, the 48-year-old head of McDonnell's Hornet tactical fighter project, found himself shunted into one of the toughest positions in the industry: the president's office at Douglas Aircraft.

Although most of the blood-letting and job cuts were undertaken by his predecessor, Mr Sears says he must still somehow squeeze a further 5 per cent reduction in costs out of a business that has shrunk its workforce by more than two-thirds in five years.

But his main job, he agrees with analysts, is to persuade carriers that Douglas has a long-term future in the civil aviation business. "We need to be credible about our designs and credible about our business future," he said recently.

In contrast with Douglas's recent history of decline, with a world market share down from 22 per cent in 1990 to some 10 per cent today, Mr Sears has a record of delivering aircraft on time and on budget.

That his F/A-18 Hornet aircraft is now in service in nine countries, in several different versions adapted to budget and service constraints, is testament enough for Mr Stonecipher who says Mr Sears's job is to "define the product line and sell some aircraft: it is really that simple".

Starting at the top of the line with the slow-selling MD-11 300-seater, Mr Sears's first move was to confirm through meetings with customers that the aircraft was too small and too limited in range for their needs.

The aircraft was a mistake which McDonnell Douglas's new management seems unlikely to repeat – even if it could afford to.

Christopher Parkes

■ **The environment:** by Michael Donne

Noise still annoys the most

Expected growth in air travel will increase protests against aircraft disturbance

Over recent years, the commercial aviation industry worldwide has been facing increasing environmental pressures of all kinds. Although noise control is the most severe, many others are now also assuming greater significance, from the need to limit emissions on the ground and in the air (in particular oxides of nitrogen) through to the conservation of resources through improved fuel efficiency, and the reduction of waste of all kinds. By achieving improvements in all these operational areas the industry can not only demonstrate its avowed desire to be environmentally aware, but also significantly enhance its efficiency and profitability.

Much is being done in all these areas. Many airlines have set up their own environmental programmes. British Airways, for example, publishes an annual environmental report on its activities in the area. The International Air Transport Association (IATA) which represents 245 of the world's airlines, encourages its members to be environmentally active, and also produces a regular Environmental Review, while the World Travel and Tourism Council has established an environmental research centre and database at Oxford. Several airlines and aircraft and engine manufacturers are participating in active research programmes to determine the precise effects of aero-engine emissions in the upper atmosphere.

Site of sore ears: more traffic means more noise for those who live under flight paths Ashley Ashwood

But the reduction of noise both in the air and on the ground remains the biggest environmental challenge. Forecasts indicate continued long-term expansion in air passenger and cargo volumes world-wide, in turn demanding additional aircraft and ground facilities. This means that the pressures to alleviate aviation noise are likely to remain a major social as well as an environmental issue. The Association of European Airlines, representing 25 airlines, believes that environmental concerns could prove to be a third limiting factor on air transport growth, in addition to those of airport and airspace capacity.

Much has already been achieved. Aircraft manufacturers have improved their designs to enhance operational efficiency, while aero-engine makers have progressively improved the technology of gas-turbine engines to reduce noise levels, fuel consumption and emissions. The airlines have been required to invest heavily in these more modern, quieter and cleaner jet aircraft, to meet more stringent national rules imposed by many states following the recommendations made by the International Civil Aviation Organisation (ICAO, the aviation agency of the UN), in Annex 16 (dealing with aircraft noise) of the Chicago Convention of 1944. The latest such recommendations, known as Chapter 3 Standards, were introduced 20 years ago and have been progressively implemented. In 1990, ICAO adopted a plan to phase out noisier aircraft. Because ICAO itself has no mandatory powers, it is up to individual member states to embody its recommendations in national laws: this is being done, for example, with a deadline of December 31, 1999, in the US, and April 1, 2002 in Europe.

Airlines have accepted operational constraints, including the introduction of noise abatement procedures on take-off and landing, with penalties for infringements, whilst approach and departure patterns are carefully designed to achieve as far as possible minimum noise disturbance over built-up areas. Furthermore, night noise curfews ranging from total bans to limited jet operations by quieter modern aircraft are imposed at many airports. This means that massive investments in facilities remain substantially unproductive for perhaps as much as six or seven hours of every working day.

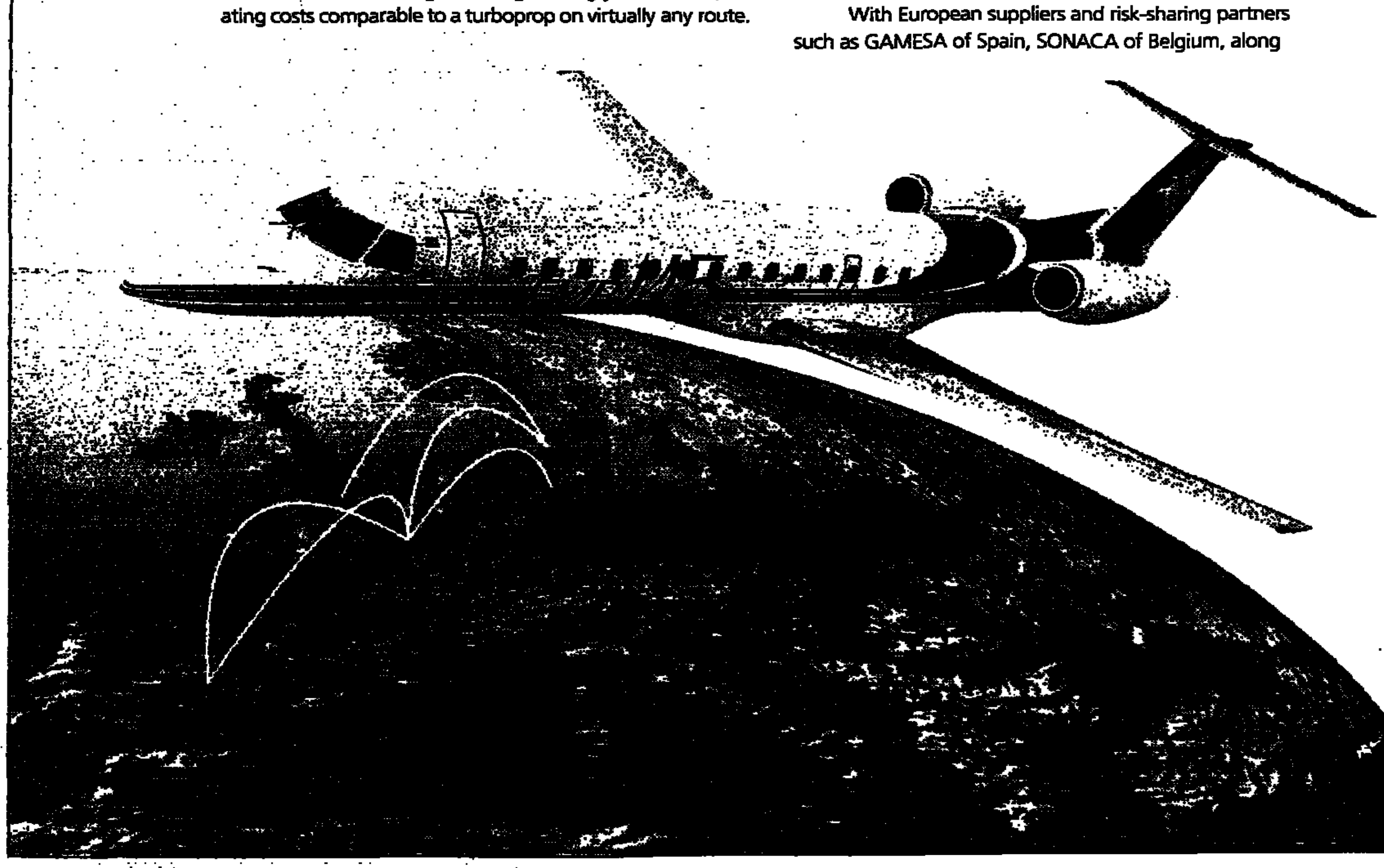
Airport owners and operators throughout the world now accept that development plans now invariably have to pass through expensive public scrutiny before they can be implemented. This can take years. The current long-running public planning inquiry into Heathrow's proposed Terminal 5 is a classic example.

Over recent months, there has been debate on how much tougher aircraft noise controls should become in response to continued public pressure. A meeting of ICAO's Committee on Aviation Environmental Protection (CAEP/3) in December, 1995, while reaching agreement on tougher controls on emissions failed to achieve an agreement on tougher noise controls. While participating in the meeting the IATA considered there was no justification – on environmental, technical or economic grounds – for more stringent noise standards. It argued that member airlines were continuing to make substantial investments in the most technologically and environmentally advanced aircraft, and that further changes to the CAO parameters would put these at risk, with only minimal or uncertain environmental benefits.

This has put airport owners and operators in a difficult position, faced as they are with increasing local and even national pressures to become ever more environmentally responsive, whilst faced with ever increasing traffic volumes. The Airports Council International, which represents the owners and operators of some 1,200 airports world-wide, would have liked CAEP/3 to recommend greater stringency in noise regulations: it argues that there is some room left in current engine technology to permit this, and proved this at CAEP/3 using the manufacturers' own data.

But in the absence of any international agreement the onus has fallen on regional organisations such as the EU, individual governments or airport operators, who are now coming under increasing public pressure to impose tougher controls. This could lead to a proliferation of unco-ordinated initiatives which will hamper the ability of airports and airlines to expand, and generate high costs for the entire industry and travelling public.

The next CAEP meeting is some time ahead. Meanwhile operators are pressing governments for tougher land-use planning near airports, with more 'buffer zones' comprising either open space or industrial development, thereby limiting the proximity of residential areas. ACI, IATA and the manufacturers are all calling for greater governmental stringency, to protect the gains achieved by the phase-out of noisier aircraft from being offset by residential development.



■ **California:** by Christopher Parkes

Slump dims golden state

Many employees lost their jobs when recession and defence cuts hit the industry

California's aerospace workers have moved on swiftly from the dark days of the late eighties and early nineties when recession and the end of the cold war rolled over the powerhouse industry of the west. At the sector's peak in 1987, the state was home to 25 per cent of the US aerospace payroll.

By the end of 1994, a third of California's aerospace employees had lost their jobs compared with 20 per cent in the other 49 states. In Los Angeles County – home to 10 per cent of the national workforce – the number employed tumbled 50 per cent to 120,000.

A tenth of the displaced workers – more than 50,000 individuals, families in tow – moved on, leaving California for the open spaces of other western states, Arizona, Utah and Nevada in particular.

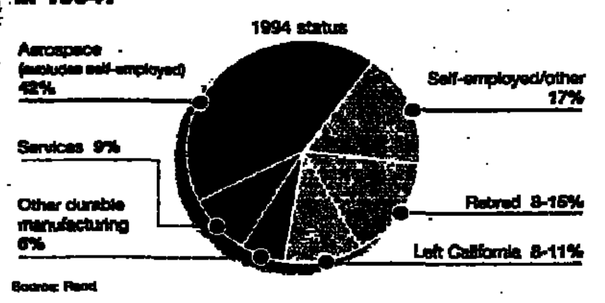
Their fate is unknown, but the rest have fared far better than predicted by official analysts, according to Santa Monica's Rand public policy research group. The same *goes for the network of small* to medium-sized companies dependent on larger manufacturers and Pentagon contracts, as well as the communities surrounding closed military bases.

Now, with the number of jobs in the state rising by about 25,000 monthly, unemployment is at its lowest for more than five years. A broad-based recovery is under way, prompting claims that the state – late to recover from recession – is once again outstripping national growth rates.

Although the aerospace industry has yet to start hiring, the erosion has stopped, and other sectors are taking up the slack. Last month, for example, manufacturing (excluding aerospace) gener*ated 8,600 jobs.*

While federal and state assistance has played a role

Where were California's 1989 aerospace workers in 1994?



Source: Rand

– Washington provided almost $2bn in special aid for aerospace on the assumption that its elite employees would face unique hardships – economists credit above all the strength of other high-technology sectors, including the entertainment industry, with preserving the state's educated, highly-skilled worker base.

A recent Rand group study, which involved tracking all 517,000 employed in Californian aerospace in 1989, discovered only 42 per cent of the workforce were still in place at the end of 1994 – yet only 2 per cent were unemployed.

A further 9 per cent had found work in services, 6 per cent in other manufacturing jobs, 15 per cent were self-employed and the balance had either retired or gone from California.

Most of the 517,000 who were still working in the state at the end of the review period emerged far better-off financially than their peers in other sectors. In the six years to mid-1994 their average pay had increased by an average 5 per cent compared with 3 per cent for their contemporaries in other durable manufacturing industries.

In effect, the traditional premium paid for aerospace workers' skills and education remained unchanged throughout the trauma, although many had moved into new areas in the interim.

The industrial base itself, although shrunken by recession and the Pentagon's 20 per cent budget cuts, has also proved surprisingly resilient. Even the infrastructural group of 1,000-odd small-scale suppliers – a sector analysts considered most vulnerable – suffered few fatalities, according to Rand.

Of almost 400 companies monitored randomly in 1992, 94 per cent were still in business in 1995: half of the balance had been merged or acquired, implying a failure rate of only 3 per cent.

A detailed study of 25 such companies with fewer than 500 employees showed that although their defence-related revenues fell 43 per cent in the five years to the end of 1994, total revenues slipped only 15 per cent. However, there was a marked difference between the fortunes of electronics and materials suppliers – who moved nimbly to open new commercial markets – and the specialist machine shops and aircraft component suppliers which were able to find alternative sources for only 20 per cent of lost defence revenues.

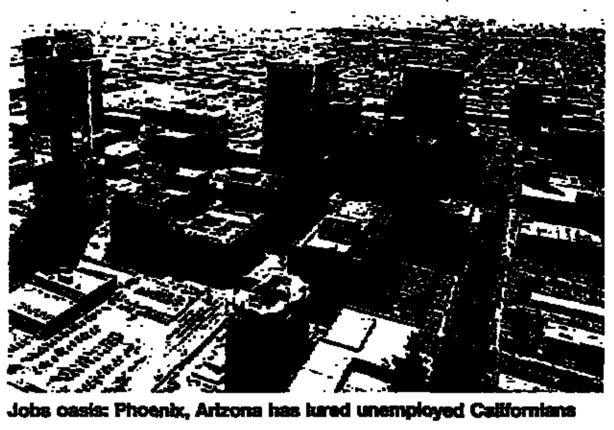
Although most tried, they were unable to manage the transition from low-volume, fine-tolerance manufacturing which might have allowed them to enter non-aerospace markets.

Such companies, almost entirely dependent on civilian and military aerospace contracts remain vulnerable to the vagaries of budgetary and business cycles, Rand said. Still, as its interviewers reported, confidence is returning, and competitive pressures are easing. Airlines were starting to order spare parts, and new revenue streams were being opened by international *noise control regulations* which required special engine components.

Small suppliers were also heartened by the high barriers to entry into their sector, which stemmed in part from their long track records, established goodwill – and their own efforts.

Most of the sample had downsized or adapted, cut costs and improved productivity – but in ways which did not dilute their potential. Engineering staff had been kept on, and most of the companies studied said they could crank production back to previous peaks within only four to six months if necessary.

Few entertained any thoughts of moving out of California, which, as Rand *noted, still "offers access to* customers, suppliers and to a skilled labour force."



Jobs oasis: Phoenix, Arizona has lured unemployed Californians

The world's favourite credit: BA's low cost of funds is something for managers such as chief executive Bob Ayling to celebrate

■ **Aircraft finance:** by Douglas Cameron

Banks on risky flight path

Aircraft financiers could be poised to repeat the mistakes of the late 1980s

The recovery in airline profits and traffic growth has been preceded by an oversupply in finance which revives uncomfortable memories of the overheating market of the late 1980s. This was followed by recession and an collapse in aircraft values. There are fears that history could repeat itself.

Historically, the airline industry has generated a profit margin of less than 2 per cent leaving it to rely heavily on external funds. Profits will pay for just 12 per cent of the $250bn in new aircraft that will arrive *by the end of 2001.*

Bank debt is the dominant source of funds, accounting for more than half of total investment. The improved financial health of the airlines and more robust aircraft values has tempted more banks to engage in this activity. "The market is in between hot and overheating," says Mr Klaus Heinemann, head of aerospace at LTCB in London. "Though it is not quite as mad as it was in the 80s."

This view is shared by Mr Thomas von Kistowsky, head of aerospace at Bayerische Landesbank in Munich. "It usually starts with large orders from the leasing companies, used aircraft prices go up and then banks are running like lemmings into the market."

The two largest lessors – Gecas and ILFC – have ordered 300 aircraft between them over the past year and a host of airlines are looking to place large orders in coming months. Jet aircraft deliveries fell sharply from a peak of $37.3bn in 1992 to $27.7bn in 1995. They are forecast to climb steadily to $50bn by 2001. But it will be 1999 before the manufacturers' order *books top the previous peak* of 1989.

The exit of many banks from the market at the start of the decade reflected the fall in airline profitability and the collapse of aircraft prices which many had assumed were on a permanent upward path. "There is a much more realistic view of aircraft prices now," says Mr Stephane Daillencourt, head of transportation at Crédit Lyonnais in Paris. "Values are not rising but have stabilised and even fallen over the past two to three years."

Intense competition for business is starting to reverse this trend, says Mr Daillencourt. "There is great liquidity among the banks: they are hard-pressed to *invest in new assets. Some* are doing things that don't make sense."

The oversupply has pushed the cost of funds down across the board. A carrier like KLM or Qantas, which would have paid 75 to 85 basis points (a basis point is one-hundredth of 1 per cent) over the London Interbank Offered Rate two years ago, has seen that halve to 30 to 40 basis points. British Airways – the best credit – can acheive less than 30 basis points over Libor, which leaves little room for profit for the lender.

Around 30 per cent of funds come from tax-driven *finance leases many involving* Japanese investors, who provided 80 per cent of total supply at the end of the 1980s. After a period of withdrawal, the Japanese have returned to the market, lending $5bn in 1995. The rebound has been complemented by the expansion in other tax-based markets, notably the US and Germany.

The entry of German landesbanks into the market over the past years has hugely boosted the supply of funds. Their commitments are forecast to reach $3bn over the next five years. However the German tax authorities are expected to change the legislation that has allowed net present value returns of 8 to 10 per cent.

The fall in the creditworthiness of airlines in the early 1990s was matched by the increased involvement of export credit agencies, notably three European agencies supporting Airbus sales and the US Export-Import Bank.

US support, in the form of guarantees and loans, peaked at $3.47bn in the year to September 30,1993 – more than 25 per cent of total Boeing and McDonnell Douglas deliveries – but has fallen back to about $1bn a year. The European agencies continue to back around 30 per cent of Airbus sales. Financial innovation, adding other structures to the export credit support, has maintained the attractiveness of this source which will continue to account for around 30 per cent of total deliveries.

The recovery in the industry's fortunes is in theory most welcomed by the manufacturers. Not only are sales returning, but someone else is prepared to foot the bill. While export credit agencies are the leaders of last resort, manufacturers have become used to backing sale to airlines too weak to raise the funds themselves.

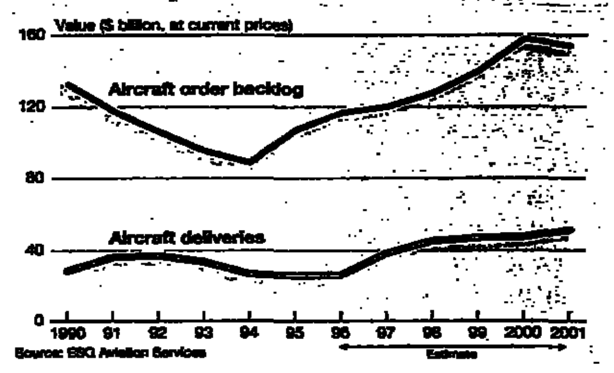
The total exposure of manufacturers to their customers climbed from $18.1bn in 1991 to $27.8bn last year, according to a recent study by Moody's Investor Service. The support came in the form of direct loans, guarantees and by leasing rather than selling aircraft.

Manufacturers argue that they have the situation under control and have cut their commitment by selling instruments in the capital markets. The problem they face is that some airlines expect support to continue even though their finances have improved.

Banks have long warned that the industry's reliance on their backing was unsustainable. But while there has been much research into tapping securities markets there is a lack of suitable assets to package for them.

The mix of funding sources is likely to remain the same over the medium term. "The banks in the market in 1989 learnt their lesson," says Mr Von Kistowsky. "But they have to compete with new entrants which see an asset they think they can always sell, and have had no problems in the past." Memories are short.

Commercial jet aircraft deliveries



Source: ESG Aviation Services

PROFILE **General Electric Capital Aviation Services**

A leviathan of world leasing

Mr Jim Johnson runs the world's fourth largest airline fleet but you will not find him fussing over the latest on-time performance figures or passenger food complaints.

As president of General Electric Capital Aviation Services (Gecas), Mr Johnson heads the world's largest aircraft operating lease company with a fleet of 424 aircraft on lease to 105 airlines and assets of $8.58bn. It manages a *further 435 aircraft worth* $9.58bn for other investors.

The announcement of further orders for 158 aircraft and 231 options over the last 12 months – with 50 to 60 more to come next year – has confirmed Gecas's role as the most powerful operator in the aircraft leasing business.

Gecas, a subsidiary of General Electric, was formed in 1993 from the effective merger of GE Capital's existing aircraft business, San Francisco-based Polaris Aircraft Leasing with GPA, an the Irish lessor then facing bankruptcy. GE bought aircraft worth $1bn from GPA and took over the management of its remaining assets with an option to buy them that expires in 2001.

Operating lessors now own 25 per cent of the world's commercial aircraft fleet. Gecas is one half of a virtual duopoly with its Los Angeles-based rival, ILFC, which has a fleet of 317 aircraft. Together, the pair are almost four times the size of their nearest competitor.

GE's corporate philosophy is to use its enormous *balance sheet strength to* dominate every sector in which it competes and Gecas follows its parent's example. With access to GE's AAA credit rating, Gecas has the lowest capital cost in the business while its large orders secure generous discounts from manufacturers.

Gecas usually orders aircraft powered by the products of its sister company, GE Aircraft Engines. Though the company says this is not a formal policy, this is bad news for rival engine manufacturers, particularly Rolls-Royce, which has failed to receive a single order from Gecas where a GE engine is available. The strength of Gecas and ILFC also puts Boeing and Airbus in a difficult position. Neither can afford to turn down the huge orders placed by the leasing companies, but find their ability to control the aircraft market eroded by the growth of two such powerful customers.

For all its size Gecas has two potential weaknesses: management and the tough criteria set by its parent company. The merger of the *assets of GPA and Polaris* management was long and messy. Gecas drifted without a chief executive for six months before the appointment of Mr Herb Depp, former president of Polaris. "Depp took over the company at a time when banging the cultures together was the main task," says one insider. "This simply didn't happen."

The GE system proved unpalatable to many former GPA executives, some of whom left the business, including key marketing staff. "GE treated people well, and most of the departures were driven by the change in corporate culture," says one former staff member. "It was regimented and bureaucratic and just didn't suit the GPA psyche."

In contrast ILFC retains the same core team – headed by founders Mr Steve Udvar-Hazy and the Gonda brothers, Lou and Leslie.

Mr Depp was put in charge of GE's large engine business in November 1994, and was replaced at Gecas by Mr Johnson, a former Boeing executive.

Gecas should benefit from the rising demand for air travel. It will have little trouble placing its new aircraft when they start to arrive next year. But long-term profitability requires the company to keep placing them throughout their useful lives – up to 35 years – when they will be competing with the new equipment of other lessors. GE's high return on equity criteria for all its divisions – up to 25 per cent, for example – may force Gecas to push up lease rates higher and erode some of its inherent advantage.

Douglas Cameron

هكذا من الأصل

صكنا من الاهل

■ **Missiles:** by Bernard Gray

UK puts faith in Europeans

The continent's guided weapon business has gained impetus as a result

Two decisions on cruise missiles have helped shape the course of the guided weapons industry on both sides of the Atlantic this summer. Britain's resolution to buy the British Aerospace-Matra Storm Shadow for its Conventionally-Armed Stand-Off Missile (Casom) gave focus to consolidation of the missile industry in Europe. At the same time the selection of Lockheed Martin and McDonnell Douglas to compete for the Joint Air-to-Surface Stand-off Missile (Jassm), raised the stakes for manufacturers in the US.

The British decision on Casom, and a parallel decision on an advanced air-launched anti-armour weapon, had been eagerly awaited by the industry. The result, which effectively cemented BAe's missiles joint venture with Matra, also firmly tipped the UK into the European missile camp. Attractive offers, particularly from McDonnell Douglas with a stealthy missile similar to its Jassm contender, which would have strengthened transatlantic ties, were ignored in favour of the European option.

In part, that was because the UK Ministry of Defence increasingly sees missiles as a key technology it wants to sway. Because missile production and operation will be crucial to war-fighting capability, the MoD wanted to have full control over the intellectual property in the missile, and to have an indigenous industry to produce it. To secure that, it had little option but to support the BAe-Matra team.

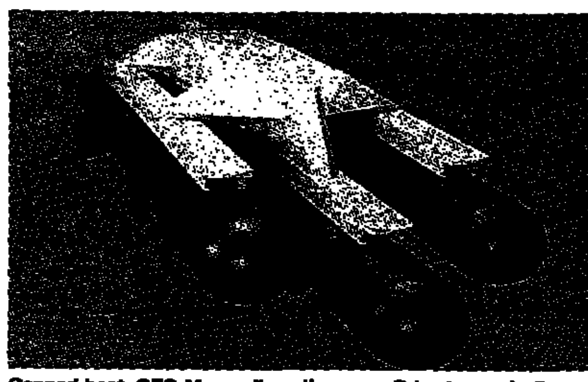
Similar considerations seem to have applied to the choice of GEC-Marconi's Brimstone missile in the anti-armour competition. While the missile is based on the Rockwell Hellfire anti-tank weapon, the important technology is GEC's high-resolution radar seeker. Selecting Brimstone has solidified GEC-Marconi's position as Europe's leading infra-red and radar seeker house, putting it in a good position to negotiate a pooling of its technology, possibly with the Matra-BAe team, later on.

By cementing BAe's ties to Matra the UK has helped create a pole around which the rest of the European guided weapons industry can consolidate. The pair are currently bidding for Thomson-CSF, the French state-owned defence electronics company; Thomson has missile technologies which would fit well with Matra-BAe Dynamics, as the new firm will be known. That could also bring in Shorts of Belfast, which has a missile joint venture with Thomson.

LFK, the missiles subsidiary of Daimler-Benz Aerospace, had been deep in discussions with Aérospatiale, but German ardour for the link has cooled. LFK could now find a way into the BAe-Matra team, and the companies are already working together on the Future Medium Range Air-to-Air Missile (Fmraam), which will be the principal armament of Eurofighter. Saab is also involved in the Fmraam team, and already has links to BAe in its military aircraft division.

Even if the progress has been a gavotte rather than a quick-step, Europe's missile business is at last heading in a rational direction. If it can avoid nationalistic concerns and rationalise industry quickly, it could find itself well-endowed with products.

The Fmraam will be capable of being fitted to most rails for Advanced Medium-Range Air-to-Air Missiles (Amraams) and of improving the performance of aircraft for long range air-to-air combat. It will be the first serious challenge to the dominance of Amraam in the world market since it was introduced. BAe's Asraam short-range weapon for Eurofighter could also be a good seller.



Canned heat: GEC-Marconi's anti-armour Brimstone missile

Matra's Storm Shadow and LFK's Taurus should both make good ground attack missiles, while BAe has the Alarm anti-radar station weapon. Europe also has technologies in anti-tank, anti-ship, air defence and guided bombs. Rationalised and properly marketed it could be capable of challenging the strongest of the US competitors.

Ironically, the situation for the US has become less clear in the past few months. Hughes' loss of the Jassm bid weakens the company's position in air-to-ground missiles, which it seemed to have taken a grip of when it bid aggressively to become sole supplier of Tomahawk cruise missiles to the US Navy. At the same time the company's world lead in radar guided long-range air combat missiles is likely to be challenged by a European Fmraam.

While Hughes has taken a knock McDonnell Douglas, which looked almost down and out after losing the Tomahawk bid, has bounced back. Its victory in the Jassm competition, and the award of the Joint Direct Attack Munition to fit guidance kits to "dumb" bombs, has put it back into the air-to-ground missile business in a big way. Lockheed Martin, which has spent time sorting through the mass of businesses it has brought together, has shown what its power can do in winning the other Jassm concept definition contract.

As a result, the US missile industry, which had seemed to be coalescing into three groups based on Hughes, Raytheon and Lockheed Martin, may now be opening out. It will also include McDonnell and others such as Texas Instruments, which is leading the Joint Stand-Off Weapon programme.

For both Europe and the US, the important facet of the coming year will be the degree to which decisions taken on both sides of the Atlantic polarise the missiles industry into two camps.

Europe has already taken decisions which effectively imply that it is not happy to be solely reliant on the US for its missile technology. For the UK to take such a decision is a remarkable step, and comes after the bad experience of buying Amraams from the US government for Royal Navy Harriers, only to have trouble finding out how they worked.

The warning shot fired at the US this summer could provoke one of two reactions. If the US decides to retaliate by closing its market to European systems further, then transatlantic missile co-operation could start to break down. If it accepts the message of the contract awards – that it needs to make its markets and its technology available on a more reciprocal basis to its Nato allies – then the result could be an improvement in co-operation.

Having started with a scrabble over cruise missiles, this guided weapons rivalry will come to a head this year in the Blue Riband area of air-to-air systems. The US is evaluating replacements for its venerable Sidewinder short-range infra-red guided missile, and is looking at the BAe Asraam on a parallel path. The UK meanwhile, is looking at the long range radar-guided weapon to arm the Eurofighter, which will pit a European consortium against Hughes's Amraam.

■ **Nimrod:** by Bernard Gray

BAe wins partial victory

Rivals of the UK concern will help it build a new British marine patrol aircraft

This year's £2bn competition to supply replacement maritime patrol aircraft to take over from Britain's ageing Nimrods was as hard fought as any in recent memory. It may not have had the open aggression and high-profile advertising of the previous fights over buying transport aircraft and attack helicopters, but the struggle behind the scenes was just as tough.

There were plenty of financial and operational issues at stake, yet at the industrial core of Nimrod replacement there was a fundamental issue for the UK aerospace industry: which company controls the integration of complex systems on aircraft, British Aerospace or the General Electric Company?

The question seems to have been decisively in favour of BAe, with the award of the contract to its Nimrod 2000 refurbishment proposal. It is also a decision which speaks volumes about the recovery in BAe's finances, and the shift in the balance of power in the UK defence sector. Five years ago GEC was the company to prop up ailing BAe; now BAe is the organisation apparently trusted by the MoD to get the job done.

Nimrod seems to have confirmed BAe as the prime contractor and systems integrator for UK aircraft, but the result is not perhaps as black and white as the company would like. For a start, Boeing has a significant role in developing and integrating the weapons' command system, a job which is likely to cost anything up to £400m ($620m), 20 per cent of the total programme cost.

Then there was the last minute fudge which saw GEC gain a substantial role in the missions system and sensors for the aircraft; three different companies – BAe, GEC and Boeing – can now claim to be working on the fashionable alchemy of systems integration on the new Nimrod.

Such uncertainty and confusion characterised the last few weeks of the competition, when tender and counter-tender went in so fast that even some of the contenders confessed that they no longer knew what the details of their own bid were. Some also suspect that the price cuts needed to win the deal were so deep that the Ministry of Defence's ambitious specification for the aircraft has been significantly cut back.

It will take some time for the details of the compromise between the three companies to be worked out. At this stage the best which can be said is that BAe's systems engineers at Warton will have oversight of a programme which will have twice as much computer code in its systems as it takes to run the Eurofighter. That will help the company bridge any gap for the workforce between the later stages of Eurofighter development and work on a Future Offensive Aircraft to replace the Tornado, or on the US Joint Strike Fighter.

Boeing will have a mission system developed which will leave it well placed once the US finally starts to think about what should replace its Orion aircraft. GEC will have pulled in valuable work for its avionics plant at Rochester and in Edinburgh.

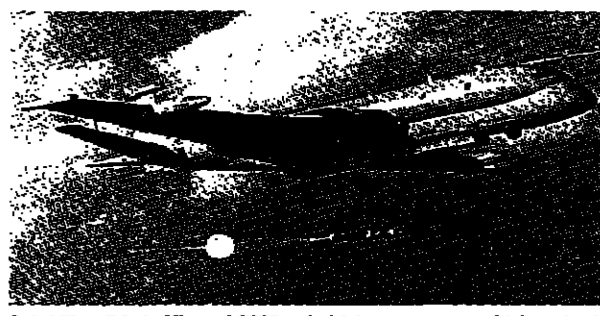
For the other contractors supplying significant systems to the aircraft, matters are a little clearer, even though no contracts have been signed yet. And while the fuss is often made of the prime contractors, contracts such as Nimrod are also vitally important to the rest of the aerospace industry.

Rolls-Royce has found a valuable new outlet for around 100 of its BR710 engines, developed as part of its small engine joint venture with BMW in a contract worth over £200m. The engines will actually be assembled at the venture's factory outside Berlin, but much of the interesting technologies on the system, such as the aero-foils and blades, come from Rolls' plants in the UK.

High pressure compressors will be made at the company's Hillington site in Glasgow, with blades made in Derby, while low pressure turbines will come from Bristol and Derby. Many other Rolls plants, and other UK manufacturers such as Vickers, also have work on the engine.

FR Aviation, the aircraft maintainance and refurbishment arm of Cobham, will strip down the old Nimrod airframes at its Bournemouth site. It will then add a new centre section and wings to be made by BAe, and re-manufacturing the aircraft to produce a basic version which FR will flight test. The total contract is worth something like £80m to the company, and gives a good backbone order to sustain the workforce.

Normalair Garrett, the aircraft systems company controlled by GKN Westland, has also won a useful contract worth over £60m in its speciality of in-flight air conditioning. The Nimrod order to supply the on-board oxygen, cabin pressure controls and dispensers for the aircraft's sonobuoys, secures the aerospace side of Normalair's business at Yeovil into the the next century.



Sub killer: BAe's Nimrod 2000 refurbishment proposal triumphed

Smiths Industries, the aerospace and medical group, will develop and produce digital engine control equipment and a flight management system evolved from its work on the Boeing 737. It will also work on controls and displays for managing the new Nimrod's weapons stores.

Smiths is also encouraging the MoD and prime contractors to push towards a central single computer for many aircraft systems. This cuts down on the need for separate power supplies and reduces the cost of integrating a ranging of computers, saving time and weight.

Ultra Electronics, the management buy-out from Dowty which expects to float on the stock market this autumn, must be particularly pleased with the timing of its £80m package of work. In a £50m contract it will produce the acoustic processors for the aircraft at its site in west London.

Racal has fought a successful rear-guard action to have its Searchwater 2000 radar fitted to the aircraft, beating off a strong Israeli challenge. The contract, worth around £60m, will consolidate its position in the maritime radar market.

Thomson Training Systems in Crawley has also won a contract which helps it branch out. While flight deck simulators are the company's meat and drink, Thomson will also provide mission system trainers in a deal worth £60m.

Shorts in Belfast has secured for itself a package of work worth around £50m, though as with GEC, the details remain to be worked out. Messier-Dowty will provide a new undercarriage, in a £40m deal.

The geographical spread of work on such an aircraft is enormous, and these companies are only the first tier suppliers. A network of component makers spread throughout the UK in turn supply them. The government's decision to make the new Nimrod as British as possible was intended to bring electoral advantages.

■ **Helicopters:** by Bernard Gray

Manufacturers dodge the chop

The industry has avoided the rationalisation sweeping the fixed-wing sector

The cottage industry that is helicopter manufacturing potters on in rustic isolation as though nothing has changed in the aerospace world. Military spending may have fallen worldwide, but the logic which has forced consolidation elsewhere in the airframe-making business has yet to have an impact on helicopters.

Europe continues with the development of three advanced and expensive helicopter systems which were conceived to meet a cold war threat. At the same time, with a couple of notable exceptions, the four US manufacturers see most programmes in their mature phase, with upgrades, refurbishment and exports some of the best business hopes.

Yet, while costs are being cut and head counts are falling at each of the individual manufacturers, there is little sign on either side of the Atlantic of rationalisation in the number of participants in the game.

Europe's position, as elsewhere in aerospace, is particularly poor; while current orders for all the European manufacturers are not too bad, the long-term picture is clouded. The Franco-German Eurocopter group faces the most immediate challenge, with threats to both of its new programmes. Earlier this year France has said that it would cut its purchases of NH90/MH90 naval and transport helicopters and Tiger attack helicopters as part of a wide-ranging defence review. Yet, so far, France has been remarkably coy about how deep the cuts will be.

Germany faces its own defence squeeze, and partly in reaction to the French decision, rumbling threats have been made about both the Tiger and the NH90/MH90. The fate of both programmes is likely to be decided at the Franco-German summit scheduled to be held in the late autumn.

Perhaps surprisingly, the NH90/MH90 currently looks the programme most likely to survive the cut. Germany seems more committed to the transport and naval helicopter, even though the technologies it incorporates are not as interesting as those of the Tiger, and despite the fact that both its main roles could be achieved with cheaper alternatives.

The Super Puma could be used in most utility transport roles which the MH90 is being designed for at a fraction of the cost, while the Lynx would serve for MH90 naval applications. Indeed, Germany is likely to confirm an order for six more Lynx for anti-submarine warfare because development of the naval NH90 has been delayed. Lynx is likely to be in service with the German navy until at least 2015, raising the question of whether a new design of airframe is needed to carry submarine warfare electronics.

The Tiger, by contrast, incorporates radar-avoiding "stealth" and electro-optics technologies which represent a step change from previous European attack helicopters. It will also be the main platform for the long range Trigat infra-red anti-tank missile, which has already cost Britain, France and Germany a fortune.

However, the Tiger is not without its drawbacks. France and Germany want different variants, while the decision by Britain and the Netherlands to buy the McDonnell Douglas Apache has badly dented the Tiger's credentials. The fall of the Berlin Wall has also undermined the basic rationale for the attack helicopter as part of a high intensity tank battle in Europe and made it politically harder to justify in Germany. Even the passive infra-red detection technology of the Tiger-Trigat combination seems to be losing out to the high-resolution radar of the Apache.

The Royal Navy has ordered 44 Merlin anti-submarine helicopters

Both programmes are therefore at some risk, but Europe's other team, Westland and Agusta, are not in much better shape. The EH101 programme is underpinned by the programme for 44 Merlin anti-submarine warfare variants for the Royal Navy, while the utility version has finally been launched with an order for 22 troop carriers for the Royal Air Force. Italy has chipped in a modest mixed order for 16 of the aircraft.

Still, while the Merlin will undoubtedly be a state-of-the-art submarine killer, it is questionable how many other navies will want to fight in the same way.

The transport utility version also has the capacity to carry a logical military unit, the platoon, but has yet to justify itself on price, or prove itself in service. Probably the most promising application will be as a search and rescue aircraft with a long endurance.

Elsewhere, Westland has continuing business for the Lynx, where notable prospects include Australia, New Zealand and Malaysia, and will build the UK Apache under licence, but the company still lacks critical mass. Agusta remains bogged down in the morass of Italian government finances.

As a result, it is hard to see how Europe's three helicopter makers can come together, even though the need is pressing. Perhaps the least painful way forward would be some kind of joint venture in marketing and support, akin to the AI(R) alliance between British Aerospace and ATR in regional aircraft.

If Eurocopter, Westland and Agusta joined in marketing, it would cut down on destructive competition, and give the combined entity a wide aircraft range to sell. Merging support would also help cut costs, and would be the first step towards a deeper alliance.

A loose federation of that kind would be hard to imagine in the more hard-headed US market, but it is equally difficult to see how the log jam will be resolved there. There have been positive developments, with the two big future programmes, the V-22 Osprey tilt-rotor for the US Marines, and the RAH-66 Comanche for the US Army, have strengthened their position in the past year. Indeed, Comanche has more or less come back from the dead.

But the overall position remains difficult. Boeing has a strong position, being on the Osprey and Comanche projects, and having the Chinook as a mainstay. Bell is also on the V-22, and Sikorsky is on the RAH-66, giving both some stake in future programmes. McDonnell Douglas is left with upgrades to the Apache for the US Army and what export markets it can muster.

Boeing probably thus has the strongest hand, and a deepened tie to Bell probably makes sense. However, Boeing could fight shy of the civil liabilities which could come with Bell, even if it believes it understands the market.

Eventually, even in the bespoke cottage industry of helicopters, something will have to give. Not even the cost-unconscious armed forces of the world will be able to bear the hideous price of keeping seven western helicopter makers going indefinitely.

■ **Future Large Aircraft:** by Bernard Gray

Herculean prevarication

French and German dithering is putting the FLA project in jeopardy

Wanted: $5bn to develop new military transport aircraft, all ideas considered. Designers are proposing whist drives, car boot sales and $50 a plate charity fundraisers to bring in the cash. Please give as generously as you can.

At the current rate of progress on the Future Large Aircraft, it will not be long before notices like that start appearing in the small ads sections of newspapers. The sad fact is that the FLA needs $5bn of development funding if it is to get off the ground but, one by one, the main countries supposed to be supporting the project are finding that they have not got the money to pay for it.

The FLA's woes are a little ironic, given the changing nature of military requirements. Increasingly, Nato members are moving away from cold war notions of massed armour and tensions on the central European plain, and starting to stress the need for mobility, rapid deployment, and flexibility.

All of that requires the ability to move personnel and equipment quickly by air, and the FLA should be a natural choice for the job. Yet somehow the project lacks the political cachet to turn the paper design into reality.

As a result, the FLA stands a less than even chance of being funded in the next five years. If funding fails to materialise, powers that want a military airlift capacity will have two choices: either borrow it from the US, or buy it from the US. And since that is exactly what Nato nations did throughout the Cold War, the chances are that it is what they will continue to do.

Formally, the FLA's fate hinges on the Franco-German summit due to be held in the late autumn, when the two governments will try to resolve their differences over funding a number of collaborative military projects. In practice, it is difficult to see how France and Germany can fund serious development work on the aircraft in the next few years, given the pressure on defence budgets in both countries.

Despite the need in both France and Germany for additional military transport aircraft, that makes an indefinite delay on any significant spending on the project highly likely, calling the viability of the whole idea into question. In political circles, there is a great deal of shuffling, with neither France nor Germany wanting to be seen as the country that killed the programme.

Senior air force figures, however, are privately commenting that the programme may fall into limbo, making it as good as dead. Airbus executives in Toulouse are not pinning their hopes on getting large amounts of FLA work in the next few years, either.

Even if the governments only propose to delay the FLA for around five years, it will suffer a potentially mortal blow, not least because the UK has to decide how to replace the second batch of its ageing Lockheed Martin "Hercules" C-130s by then. The loss of the potential UK order for 30-40 FLA, and the corresponding boost to the market for the updated C-130J, would knock the economics of producing the FLA badly.

Faced with government foot-dragging, Airbus Military Aircraft, the Airbus arm that will manage the FLA if the programme goes ahead, and its shareholders, may have little alternative but to fund a pre-development study to flesh out the aircraft's costs and performance themselves.

Airbus has devised an $80m, 11-month study that the consortium is confident will validate the details and costings of the design. If the study goes as expected, it should allow Airbus to offer governments a programme that would cost $5bn to develop, and produce aircraft with 50 per cent more cargo space than the C-130J for $75m each.

Enthusiasts for the programme say that the higher air speed of the FLA increases its lift advantage over the Hercules, and that its more modern design would make through-life costs comparable with C-130 ownership. With the ability to lift outsize loads such as armoured personnel carriers and helicopters, the FLA is, they say, a cost-effective and attractive proposition.

Provided governments were to commit to firm orders for the programme promptly at the end of the study – effectively by December 1997 – Airbus could move to a single stage of development and production in time to meet the RAF's needs in 2004.

The delays over the FLA can only be music to the ears of Lockheed, which can see its near-monopoly in the field of tactical airlift being maintained. As well as the RAF launch order for the private venture development of the C-130J, a dozen craft are destined for the Royal Australian Air Force and a nominal pair are due to enter the US Air Force inventory. With the market for replacement Hercules growing strongly over the next decade as old air frames start to tire, Lockheed seems well placed.

McDonnell Douglas could also benefit if the FLA programme ends up in the deep freeze. Now that the US has confirmed the seven-year procurement of another 80 of the jet C-17 "Globemaster III" aircraft, the future of the long-range strategic aircraft looks secure.

If improvements in production processes and the firm Pentagon order mean that the cost of the aircraft starts to fall, McDonnell can start to think realistically about exporting the aircraft for the first time: an event barely imaginable when C-17s cost almost $300m each to produce.

Blaze of glory: a Royal Australian Air Force C130 Hercules tests its infrared counter measures

With export prices closer to $200m, air force commanders in Europe and Japan can start to dream of running C-17s with some hope that their wishes may become reality. European air force commanders are already doing just that, and are quietly considering how best to handle the idea.

A proposal for a joint European Nato buy of the aircraft, similar to the acquisition of the E-3 "Sentry" airborne early warning aircraft in the 1980s, would ease the political difficulties of France and Germany over buying US equipment.

PROFILE Mike Turner, president of the SBAC

Strength after trial by fire

Being president of the Society of British Aerospace Companies in the run up to the Farnborough Air Show must be a bit of a headache. Combining it with a day job as a director of one of the leading companies involved in the glacially-slow restructuring the European aerospace industry ought to be enough to turn it into a migraine.

Yet Mr Mike Turner, whose lot it is to have both jobs, seems pretty chipper. Perhaps that is because British Aerospace, where he is one of four executive directors, has done pretty well from the recent batch of Ministry of Defence orders, winning both the replacement maritime patrol aircraft and cruise missile competitions. It may also be because, while the rest of Europe struggles with high costs, low profits and a severe squeeze on government defence spending, BAe has already experienced much of the pain that other companies are now suffering.

According to Mr Turner, the trial by fire that BAe has been through and the rebound in profits that has seen its share price jump from £1 to over £9 has left the company well placed to play a pivotal part in helping to rationalise the European industry.

"The pressures which have forced us to become competitive in civil and military aerospace are not going to go away. We have to adjust to a market where we are striving to be more competitive. "This is starting to dawn on our French and German counterparts, and we have already accepted it."

Mr Turner seems convinced that there is no alternative to a Europe-wide rationalisation of both the civil and military aerospace business, even if it causes trade ructions with the US and means that countries cannot retain national champions in all spheres.

"The splintering of European research and technology effort is a criminal waste of money, for example. The US already spends four times as much as Europe on aerospace research and technology, yet a great deal of the European effort is duplicated."

Still, while Mr Turner acknowledges the difficulties and accepts that the rapidly rationalising US industry is snapping at Europe's heels in many markets, he believes there is still time.

"It will take five years to rationalise the European industry. It's frustrating that it will take that long, but this is Europe, and it is just a fact of life. But provided we get on with it, we do have that time."

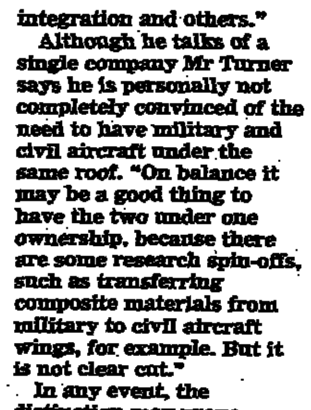
He also says he is impatient to get on with the job because Europe has a good sales pitch. "Just looking at our own company, we have some great products to offer. The Jernas air defence system, the Advanced Short Range Air-to-Air Missile, and Eurofighter, for example. I think it is vital for us to press on so we can get products like Eurofighter into the market."

If Mr Turner is right that change is coming, what will the industry look like in five years' time? "There has to be a European aerospace company where the management has operational control of the assets it needs.

"We will need to go beyond the current joint venture structures, which are simply not good enough. A single company which we could create would probably have several divisions such as military aircraft, civil aircraft, missiles, systems integration and others."

Although he talks of a single company Mr Turner says he is personally not completely convinced of the need to have military and civil aircraft under the same roof. "On balance it may be a good thing to have the two under one ownership, because there are some research spin-offs, such as transferring composite materials from military to civil aircraft wings, for example. But it is not clear cut."

In any event, the distinction may prove



Mike Turner: keen to get on with rationalisation process

largely academic, since if the military and civil aircraft companies own most of the assets they need and have a single management structure running the business, the national parent companies will become more like ordinary shareholders.

"That is the debate we are having over Airbus at the moment. On the one hand, there may be a benefit in keeping some manufacturing assets within national companies and outside Airbus's direct control, so that Airbus can offer work up to competition rather than do everything in house. On the other, Airbus will need to be able to run its business, and that means controlling some assets."

Mr Turner acknowledges that until recently the push for European rationalisation lacked momentum, partly because industry and governments have both waited for the other to take the initiative. "That situation has moved on, I'm happy to say. It is for industry to lead the process, but I'm convinced that we will now get the backing of the UK government when we need it. The MoD has recognised that it is important for Europe to come together, and that is a big change."

On the continent, Mr Turner hopes that commercial pressures will encourage companies and governments to avoid trying to be too possessive about control of particular aspects of their industry, which could risk damaging integration. "It is a risk, but people must be pragmatic about what is practicable in this situation," he says.

While the European cauldron continues to bubble, Mr Turner insists that BAe and the SBAC have not been idle at home. BAe will spend around £50m next year setting up a global marketing organisation, which will split the world into geographical territories and have permanent staff based in each region to get marketeers closer to their customers. The SBAC is also negotiating with the British government to invest £200m in UK aerospace research by the millennium, with funding to be split equally between industry and government. "This is an effort to translate the work of technology foresight teams into action. It is part of a process where the government has acknowledged that the British aerospace industry is now competitive on a global scale."

Bernard Gray

■ **Eurofighter:** by Bernard Gray

Project pulls out of spin

There is still concern that the management is failing to act with sufficient urgency

Nineteen-ninety six will, almost certainly, go down in history as the year when the four-nation Eurofighter programme finally moved over top dead centre and started to hurtle toward production. Many of the remaining barriers to the project's success have been resolved this year and with luck the rest should be sorted out by the year end. It seems a long way from the dark days of 1992 when the Eurofighter was close to extinction.

There is much good news to report on the programme. Since a joint venture between British Aerospace, GEC-Marconi and Daimler-Benz Aerospace was set up to sort out the difficulties with flight control systems, many of the problems have been resolved.

A new software package is being fitted to the prototype aircraft that will allow the pilot much more freedom of manoeuvre at subsonic speeds. Beyond that, work is in hand on software improvements that will afford similar agility beyond the sound barrier, and the the project's engineers are confident that they understand what needs to be done.

Progress has also been made on the integration of the radar and radome – one of the other main technical bugbears of the programme. Again, engineers seem now to have the measure of the task. Indeed, pilots have been very impressed with the Blue Vixen radar that GEC-Marconi has made for the Royal Navy's F/A 2 Sea Harriers. The Blue Vixen shares many technologies with the Eurofighter radar.

Flight tests have also pleased the designers: the aircraft is performing very closely to the predictions of computer models, allowing the engineers to hope that the formal flight proving could be cut. Officials in the UK Ministry of Defence are also impressed with the performance of the aircraft.

Out of sight: Eurofighter should excel in combat beyond visual range

Complementing the technical progress is the fact that the long-standing dispute between Britain and Germany over the allocation of work for the production phase of the programme has finally been resolved. Germany increased the number of aircraft it agreed to buy from 140 to 180, while Britain trimmed its off-take fractionally, allowing Germany to take the 30 per cent share of work it felt it needed, and raising the UK's share of the programme to 38 per cent.

The final fillip the programme needs in 1996 is agreement between the governments that the contractors can move ahead with investment in the tooling and manufacturing plant needed for production. Giving approval for this £4.5bn production investment phase will effectively guarantee that the aircraft goes into production.

One encouraging sign that the approval may be reached in time is the deafening silence from defence ministries about the prices industry is quoting for production of the aircraft. Far from screaming in the streets about the outrageous bills, there has been quiet satisfaction that the quotes have come in lower than the previously indicated prices.

Indeed, such was the confidence in the UK, the MoD considered announcing that it would be proceeding with Eurofighter production investment, subject to contract and agreement with its partners, before parliament rose for the summer. Discretion proved the better part of valour, however, and the MoD has decided to wait until its partners are ready and the aircraft has passed some more performance milestones.

Getting that agreement from partners could be more difficult than it looked in the spring, however. Germany in particular is under extreme budget pressures as it strives to squeeze into a financial corset to meet the conditions for EU economic and monetary union in 1999.

Germany's defence budget has been cut twice in the past two years. While there is no longer a real threat to the survival of Eurofighter in Germany, there could be attempts to delay production investment funding.

The bind is made tighter by the fact that funding for the programme will have to get through Bundestag parliamentary committees that have been hostile to the programme in the past. Those same committees are also still smarting from the decision of defence minister, Mr Volker Rühe, to increase the number of aircraft Germany will buy.

Autumn will thus be a tense time for the Eurofighter, and while the inside betting is that it will clear the Bundestag hurdle, the margin is currently too close for comfort.

Any delay would be a severe problem for the programme, which has already slipped far behind schedule, and for companies such as BAe and Dasa, which badly need the production work to fill their factories. Indeed, if anything, there is a strong case for accelerating the roll-out of the aircraft now that technical problems have in large part been solved.

As well as the industrial arguments for filling factories, there is a good operational case. If Eurofighter is as good as its designers claim, then the sooner it is in operational service with the partner air forces, the sooner it can be directly compared with other aircraft and the more likely it will be to win export business.

It will also be important to have the Eurofighter firmly established in the market before the Joint Strike Fighter starts to appear on the horizon. Eurofighter may be a more capable aircraft than the JSF, but the newer design has advantages: Stealth is sexy and will attract air forces, while the single engine, low price concept will also impress finance ministers. The idea of being part of the next-generation F-16 programme, buying an aircraft that is likely to see almost 3,000 in US service alone, will also have appeal.

Eurofighter's best chance to counter that threat is to give potential customers affordable performance at least a decade before the JSF enters service. Unfortunately, neither the partner governments, nor the companies involved, seem to be pressing hard for this.

The main criticism that can still be levelled against the project is that it lacks sufficient central managerial drive. Problems are being resolved, but in everybody's own good time, with little sense of urgency – or frustration at the fact that the first deliveries to the RAF are unlikely until 2002, with full operational squadrons not on station until 2005. Nor is there sufficient irritation that this further slippage of almost two years has occurred in barely three years of work.

If the Eurofighter is to have a future beyond the countries that have conceived it, greater central focus and a better eye for the market are needed.

Rather than slapping one another on the back about the number of problems they have solved, the partners need to get to work on reclaiming the time that has been lost.

PROFILE Sir Robert Walmsley, British chief of defence procurement

Pragmatism in procurement

As the new British chief of defence procurement, Sir Robert Walmsley, 55, has some tough acts to follow. Sir Peter Levene's hard-nosed reform of defence acquisition has slipped into folklore: it was a process which has strengthened the parts of the UK defence industry which survived it, but left plenty of dead bodies and broken bones in its wake. Sir Malcolm McIntosh's open and relaxed style masked an equally determined attitude to squeezing value for money from contractors.

Sir Robert has taken over at a critical time for the defence industry. The need for further rationalisation is clear, but the path the industry should follow to achieve it is not. And there is the further knotty question: what do you do with the Levene Doctrine of competitive tenders when there is only one competitor left?

Sir Robert is at least well placed to recognise the options available to the Ministry of Defence and to industry. In his previous job as controller of the navy he was in charge of the Royal Navy's equipment programme.

In that post he saw every variant of the approach the MoD could take towards buying its weapons. He oversaw the latter stages of the Trident programme, a non-competitive contract awarded to a single contender; the negotiations of a second batch of Trafalgar submarines, which saw two consortia vying for prime contractor status; the cut-throat competition between warship yards for Type-23 frigate orders; the bruising "no acceptable price, no contract" negotiations over the order for two marine assault ships with the only yard capable of building themsels; and the Common New Generation Frigate collaborative programme with France and Italy.

From the tone of his conversation it appears Sir Robert intends to bring aspects of all of these methods to defence procurement. The fluid situation demands a flexible attitude.

"We believe in competition, it has served us well, but where it is appropriate we will look at how we can develop partnerships with industry, and we will look at joint international efforts," says Sir Robert. "Britain has one of the most open defence procurement systems in the world, and I would like to see it stay that way."

When he talks of partnerships, Walmsley stresses he does not have in mind the kind of cosy relationship which pre-dated the Levene revolution. "It may be in some areas we are left with only one realistic potential prime contractor on a programme, and we will have to work closely with that company. But that does not mean that we have to abandon competition. Prime contractors typically only account for 20 per cent of the work on a project, and there is often scope for competition in supply of sub-systems. We will pursue that."

At the prime level, Sir Robert believes there are lessons which can be learned from the North Sea oil industry. There, participation in the risks and rewards of prime contracting are often shared with lower-tier companies to bind the team together.

It is an approach which is already at work on the Trafalgar submarine programme. After a run-off between a consortium led by GEC-Marconi and a team headed by VSEL, the Barrow-based shipyard, Walmsley decided last December to negotiate with Marconi as sole designated prime contractor. Other companies will have to compete to get into the programme.

Despite the continuing emphasis on competition, there are areas where Sir Robert thinks industry and the MoD can work more closely together. "I think we could have a common risk register on

Walmsley: thinks there is much to learn from other industries

programmes for both industry and the MoD, for example," he says. "There is no conflict there, indeed it would be helpful if industry and its customers had a common appreciation of where risks lie."

Sir Robert also wants to cut costs by keeping the use of military specifications to the minimum, by eliminating contract changes and appointing Procurement Executive programme managers to be responsible for all aspects of a project.

Costs can also be cut by streamlining development and manufacturing. "We have to get our time to market down," he says. Techniques borrowed from the automotive industry may be helpful here and Sir Robert is pleased that his new opposite number in France, Mr Jean-Yves Helmer, is from the car maker Peugeot.

Walmsley identifies solving systems integration problems as one of the key challenges facing industry and the MoD. He says that the ministry can help by making sure it does not split work between contractors in such as way as to create problems. "We have to make sure we do not own the critical interfaces," he says.

The other main tool he suggests is the increased used of computer simulation to model every aspect of a system's performance, which can accelerate development and predict problems at a stage where they are easy and cheap to resolve.

While Sir Robert has clear ideas on the way he wants procurement to run, he remains coy on how industry might consolidate. He is particularly keen to stay on the fence on the subject of transatlantic or European collaboration. "Some of our programmes are clearly so large that we have no choice but to work internationally. But we won't become polarised towards Europe or the US."

Still, he does believe that industry needs to rationalise across international borders, and that governments will have to show greater flexibility about which capabilities they retain if that is to work. "Governments can make a contribution if they allow work to move to the most sensible place."

Britain, he thinks, behaves well in international programmes, and he clearly considers that the UK has moved to satisfy continental concerns about its procurement policy. "Given procurement announcements we made recently, I think no one can argue that we are not doing our bit to help Europe work together."

Bernard Gray

■ **Defence consolidation:** by Bernard Gray

Europe lags US in alliance-making

The industry's forces must unite if they are to be internationally competitive

Rumour and gossip are swirling around the European defence industry like chatter in the Formula One pit lane when the annual round of driver moves is at its height. Everyone, it seems, is talking to everyone else about deals, alliances, mergers and trades. Yet while the political manoeuvring is intense, few companies have signed firm deals.

The inertia contrasts with the situation in the US, where the deal that has seen Boeing buy Rockwell's defence business for \$3bn is the latest example of quick consolidation.

Many of the reasons for the glacial pace of change in Europe are well rehearsed: worries about national security reinforce each European country's desire to maintain its own defence industrial base. When combined with incompatible procurement philosophies, mismatched timetables and differing military requirements, the result is a splintered industry in a log jam.

The pile-up was made worse recently by the French defence cuts, which seemed to fall disproportionately on international collaborative programmes such as the Future Large Aircraft, and the Tiger attack helicopter.

All of these were being developed jointly with Germany, which could now retaliate by chopping the Helios spy satellite programme. Without joint programmes it will be difficult for the fragments of the European industry to cohere and much depends on the outcome of the Franco-German summit in December.

Despite such setbacks, new factors are beginning to emerge that give a glimmer of hope that the industry may yet be put on a sounder economic footing. Many of the reasons for slow progress being cited now suggest that the complex web of relationships is to blame. Until industry executives can calculate how any possible move will affect other alternatives, they are reluctant to commit themselves.

The result is a huge exercise in combinations and permutations to determine the best way forward for each of the forces in the industry, combined with hard-headed conversations about which of the options is politically realistic. While that process is frustratingly slow, it does at least show that the industry is finally taking the need for consolidation seriously. It also offers the possibility that once the main options and their ramifications have been assessed, events across a wide range of fields could move very quickly indeed.

Much of the interest currently focuses on France, where the government is finally moving towards rationalising and privatising its defence industry. The privatisation of Thomson, the electronics company, will have the most immediate impact outside France. Currently, the French government is negotiating with two French-led consortia over who should buy the company when it is sold. But whichever is the winner, outside companies are likely to become involved.

Lagardère group, owners of the Matra defence company, wants to buy Thomson-CSF, the defence electronics arm of Thomson, in alliance with other European defence companies. Lagardère's plan is to allow other companies to buy minority stakes in specific parts of Thomson-CSF's business, while it will have a two-thirds shareholding in the overall operation.

It has also said that it would sell Thomson Multimedia, the company's television manufacturing subsidiary, to Daewoo of Korea.

This model builds on the approach it has taken with its own defence businesses. It has formed a joint venture with British Aerospace in missiles, and another with GEC-Marconi in satellites. Under Lagardère's plan parts of Thomson's operation in specific business areas would be partnered with foreign companies, such as BAe, Daimler-Benz Aerospace and GEC-Marconi. Thomson's missile activities, for example, would be included in Matra-BAe Dynamics, the two concern's missiles joint venture.

Endangered Tiger? The weight of recent French defence cuts seemed to fall disproportionately heavily on international collaborations

While this plan is clearly in Lagardère's interests, since it would give the company control of most of the French defence electronics industry for a relatively low cost, it is not clear that it will give the European defence electronics industry the critical mass it needs to compete against US giants such as Lockheed Martin.

The plans of the other main bidder, the French telecoms company, Alcatel, are less clear. Alcatel originally said that if it succeeded in acquiring Thomson it would keep the television business, initially an attractive idea to the French government. It would also look much like GEC, with telecoms, power engineering, defence and consumer electronics businesses under one roof.

However, Alcatel probably lacks the finances to keep all of its existing businesses and buy Thomson. There is strong speculation that the company could reduce its 50 per cent holding in the GEC Alsthom power engineering operation, and that its 44 per cent shareholding in Framatome, the French nuclear power construction company, could also go.

Alcatel could also bring in other partners such as GEC to support its bid. A joint venture that pooled GEC's Marconi division with Thomson-CSF would have strong industrial clout and would be a European defence electronics company with sufficient mass to take on global competition. But when GEC tried to arrange a similar deal with Thomson directly earlier this year, the French government responded by replacing Mr Alain Gomez as head of Thomson.

Whichever group wins, Thomson will be strongly placed in the defence electronics and systems integration business.

Clearly with the four-nation Eurofighter, the French Rafale and the Swedish Gripen all being wound up for production, consolidation is badly needed. With the talks between Dassault and Aérospatiale designed to produce a merged French equivalent to BAe or Dasa, and with the alliance between Saab and BAe bringing the Swedes into the British camp, the three main players in the military and civil airliner business are moving into position.

The easiest deal to complete would be a tie-up between BAe and Dasa, partly because both are already in private hands and partly because the two work together on Eurofighter, as well as in Airbus. However, Daimler is still licking its wounds after the Fokker debacle, and the parent company may not yet be ready to inject sufficient capital into Dasa to make a joint venture with BAe work.

There are also good tactical reasons for going slowly. Both BAe and Dasa are keen to see production investment funding for the Eurofighter agreed before the year end. One of the main sticking points will be getting the funding through German parliamentary committees, which may be disinclined to pass money for what they already regard as "the English aeroplane" if Dasa moves closer to BAe.

Both countries are equally keen not to isolate France, and are therefore looking for ways to include Aérospatiale and Dassault, or at least to reassure the French government of its place in the sun.

Progress on converting Airbus into a fully private company may help here, but the mis-match between Eurofighter and Rafale programmes remains a serious drawback.

This understandable but potentially fatal sloth is seeing the European industry fall further behind the US. Straws in the wind show how US competition in export markets is accelerating.

Hungary, which had been expected to negotiate a co-production agreement on the Saab Gripen, has delayed taking a decision for six months after hard lobbying and low prices offered by Lockheed Martin on F-16s. If Europe is not to be marginalised in such markets, it must work to become competitive at a much faster pace than the leisurely stroll some executives currently have in mind.

As well as commercial readiness, it will take political will to make that happen. Governments will need to construct a procurement framework that gives industry the best chance to make long-term partnership decisions. The nascent Franco-German arms agency is a vehicle waiting for just such a task.

There will also have to be greater preparedness to give and take between governments; excessive greed or ambition for control of the industry will lead to the deadlocked fighting that would ensure that there is no industry left worth arguing about.

Britain has made a move in this direction recently with its purchase of the Storm Shadow cruise missile, which cemented the missiles joint venture between BAe and Matra. It remains to be seen whether other countries are moving to compromise too.

■ **The Joint Strike Fighter:** by Bernard Gray

Battle will decide war

The consortium that wins the order will dominate the industry

An order for 3,000 fighters is enough to make even the most indolent aircraft salesman get out of bed and go to work in the morning; and with the US Joint Strike Fighter programme worth well over \$100bn to the aerospace industry over the next 20 years, it is not just the sale staff who are jumping.

Top executives know that more than the F-22 or the Eurofighter programmes it will be the Joint Strike Fighter which determines which companies dominate the fighter aircraft industry in the next century. Three consortia are fighting to win that business, yet while the aircraft will not be in service for over a decade, by the end of this year one of those teams will already have lost.

It is the sheer scale of the programme which makes it so decisive. The US Air Force wants around 1,900 single-engine, single-seat tactical fighters to replace its F-16 fleet from around 2010; the US Marine Corps is looking for 600 short take off and vertical landing (Stovl) strike fighters to replace its AV-8B Harriers; the US Navy will require 300 stealthy carrier-based aircraft for deep strike missions in the early stages of war; and the Royal Navy needs around 100 Stovl fighters to replace its Sea Harriers.

Each of these requirements is scheduled to be met with one basic aircraft, with the variations for each mission kept to an absolute minimum: the Pentagon wants around 90 per cent of the aircraft to be common in each variant. All told that adds up to almost 3,000 aircraft from one production line for the launch customers alone; and with low cost one of the main priorities, the JSF has excellent export prospects.

The Pentagon has said it wants the basic JSF to have a fly-away production cost of less than \$30m at current prices; and that even the more complex Stovl variant should cost less than \$35m. There are plenty of countries operating Lockheed F-16 and McDonnell Douglas F-18 aircraft around the world which will eventually have to replace them, and which would love to get their hands on a stealthy attack aircraft at that kind of price. Provided the Pentagon is prepared to sell them the technology, the JSF offers just that.

The Pentagon has set down a few ground rules for teams bidding. A high degree of common design between the conventional fighter, carrier-based jet and Stovl versions; a keen price; use of stealth technologies, including shaping the aircraft to avoid radar, special radar-absorbing materials, and storing bombs or missiles inside the aircraft to cut radar reflections; and use of the same Pratt & Whitney F119 engine which powers the F-22 fighter. From the three teams currently pitching, the Pentagon will select two to go forward and flesh out their designs by the end of the year, with a final winner to be selected around 2000.

While the prospect is mouth-watering for US air frame makers, there is also a clear realisation of just how high the stakes are. To the winner goes a place in the sun as one of only two or three companies in the world still in the fighter aircraft business 25 years from now. The losers will, in all probability, be cast into outer darkness.

As a result, all of the teams in the competition are taking the bidding very seriously indeed. Lockheed Martin, the colossus of the US defence business which owns the Fort Worth F-16 fighter plant and which is lead contractor on the F-22, is inevitably in the bidding. It is offering an aircraft which is essentially an evolution of its design for the F-22, although it uses only one of the P&W engines, rather than the two which power the F-22.

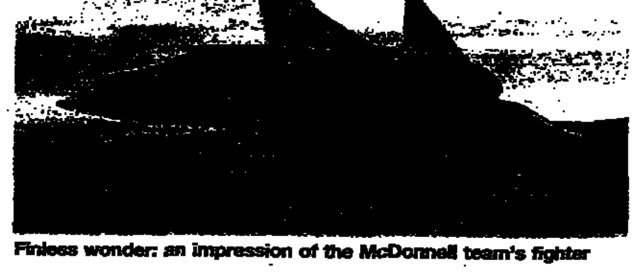
Lockheed's ability to lean on its development experience with the F-22, and its knowledge of working with the P&W engine means that it can argue that its solution offers lower technical risks than its competitors. It can also offer some overlap in use of parts with the F-22, potentially cutting the cost of new aircraft to the Department of Defence, and possibly reducing the level of spares which the armed forces would have to carry.

To power the Stovl version of its jet, the most unconventional part of all three offerings, Lockheed is planning to use power from the main engine to drive a vertically mounted fan which will allow the aircraft to hover.

McDonnell Douglas, which has teamed up with Northrop Grumman and British Aerospace for the competition, is also leaning on its experience in the F-22 competition for its offering. The aircraft it is proposing clearly owes a debt to the F-23, the McDonnell design which lost out to the F-22.

To cut down on the aircraft's radar reflections, McDonnell has all but eliminated the tail of the proposed fighter. Instead, it is relying heavily on using nozzles to direct the jet exhaust of the aircraft and keep the fighter stable in flight. While all of the contenders intend to use such thrust vectoring, McDonnell's design is most heavily dependent on the idea. If it works, it could be a significant advantage.

McDonnell's Stovl design is more radical than the others. It proposes using a separate vertically mounted engine, set directly behind the pilot, to generate lift for short take off and landing.



Finless wonder: an impression of the McDonnell team's fighter

Boeing has muscled in on what was supposed to be a cosy two-horse race between Lockheed and McDonnell. However, some of its ideas impressed the Pentagon, and its design has been included in the race. It has used the technology which powers the Harrier jump-jet to get lift for its Stovl version. This directs the exhaust from the main engine downwards to lift the aircraft. While this cuts weight and saves space for fuel or weapons, the hot gases can damage landing surfaces.

Boeing's proposal has one other, potentially fatal, drawback. Its aircraft, to put it nicely, is not very pretty. In these days of mathematically computed odds of victory in war, such things ought not to matter. But USAF generals are pilots, and romance plays a big role.

Still, because the stakes are so high, whoever is thrown out of the competition at the end of this year might well end up in one of the two remaining consortia, courtesy of a Pentagon arrangement. It is not difficult, for example, to imagine a Lockheed-Boeing team, mirroring their teaming on the F-22, being set against the McDonnell-Northrop-BAe alliance.